INTRODUCTION

E & E Magnetic Products Limited

E & E Magnetic Products Limited (EEMPL) has been positioned as a major supplier of high quality magnetic related products. With the worldwide presence of our engineering teams, we design and manufacture a wide range of products such as magnetic components, magnetic integrated connectors and electronic modules. Products are widely used in telecommunications, networking, computing, industrial, automotive and consumer electronic applications.

As one of our key factors to success, EEMPL has established a far-reaching sales and marketing network which well covers our customers located worldwide. In addition to our sales representatives and distributors, we have direct sales support offices in USA, Canada, Europe, Singapore, Taiwan, Hong Kong and China.

In order to fulfill our mission of providing the best value to our customers, EEMPL is committed to develop cutting-edge technology with our high-tech business partners, uphold stringent product quality and compliances with international industrial standards, provide on time deliveries and offer our products at most competitive pricings.

Magnetic Integrated Connector Modules

In order to support the ever-growing needs of smaller size, lower electro-magnetic noise components, innovative, customer-oriented product series - Magnetic Integrated Connector Modules (MIC) are developed.

Magnetic Integrated Connector Modules (MIC) are introduced in order to support the ever-growing needs of smaller size, higher quality, less electro-magnetic noise components.

Indirect benefits also include saving in PCB real estate and reducing in component-count, which result in better end-product design flexibility and cost control.

A wide range of IEEE 802.3 complied MIC for LAN, Telecom and other applications are offered. Hundreds of MIC packages in various platforms, ranged from single port up to 2X8 ports and different chip side footprint pattern are readily available.

Elec & Eltek依利安達
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Magnetic Integrated Connector Modules

General Information / Reference

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1000 BASE-T APPLICATIONS

SINGLE PORT

1XN, GANG TYPE

2XN, STACK TYPE

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

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DATA SHEETS

10/100 BASE-T APPLICATIONS

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
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Magnetic Integrated Connector Modules

Data Sheets

Supplementary Information

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

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IC Cross Reference

Magnetic Integrated Connector Modules
1000Base-T Applications

1000BASE-T APPLICATIONS					
IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
Agere	ET1011, ET1012	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
	ET1081	1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
	ET1310	1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
	ET4100	1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
	ET4001, ET4101	1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
		2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
		2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119
Broadcom	BCM5400, BCM5401	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
	BCM5411/21/21S	1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
	BCM5460/61	1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
	BCM5701/02/03/04/05	1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
	BCM5707/21/51, BCM5402	1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
	BCM5404/14/24	1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
	BCM5434/35/64/64S	2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
	BCM5478/5487/5488	2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
	BCM5345/46/84/85/88	2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119
Intel	82540/ 541/ 544/ 543	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
	82544/ 545/ 546/ 547	1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
	82570	1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
		1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
		2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
		2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119
LSI Logic	L80600	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
	L80601	1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
		1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
		1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
		2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
		2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119

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IC Cross Reference

Magnetic Integrated Connector Modules
1000Base-T Applications

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IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
Marvell Semiconductor	88E1010/1011S	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
	88E1111/1112	1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
	88E1040/1040S/1041	1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
	88E1041S/1042/1042S	1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
	88E1141/1145/1149	1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
	88E8000/05/06	1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
	88E8010	2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
	88E8022/36/50/62	2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119
Micrel (Kendin)	KS9020	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
		1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
		1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
		1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
		2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
		2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119
Mysticom	MY1001	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
		1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
		1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
		1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
		2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
		2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119
National Semiconductor	DP83820	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
	DP83861/65	1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
	DP83864	1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
		1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
		2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
		2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119

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1000Base-T Applications

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IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
Realtek	RTL8211	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
	RTL8169	1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
		1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
		1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
		1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
		2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
		2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119
Vitesse (Cicada) Semiconductor	VSC8201/8211	1X1, Tab up	Straight	MJ-11U2GYA4-G11S	MJ105
	VSC8221/8601	1X1, Tab up	Straight	MJ-11U2GYA4-G31S	MJ105
	VSC8224	1X1, Tab up	Straight	MJ-11U2GYA4-G709	Contact Us
	VSC8234/8244	1X4, Tab up	Straight	MJ-14U2GYA4-G11S	MJ108
	VSC8558/8538	1X4, Tab up	Straight	MJ-14U2GYA4-G31S	MJ108
	VSC7380/7384	1X4, Tab up	Straight	MJ-14U2GYA4-G709	Contact Us
	VSC7301/7303	2X4, Stack	Vertical	MJ-24N2NNA20G115	MJ119
		2X6, Stack	Vertical	MJ-26N2NNA20G115	MJ119
		2X8, Stack	Vertical	MJ-28N2NNA20G115	MJ119

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IC Cross Reference

Magnetic Integrated Connector Modules
10/100Base-T Applications

10/100BASE-T APPLICATIONS					
IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
AMD	AM79C874/C875	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	AM79C971/972/C973/	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	AM79C975/C976/C977	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
	AM79C874	1X1, Tab down	Zigzag	MJ-11D2NNA0-H73D	Contact Us
Broadcom	AC101, AC101L	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	BCM5220/ 5221	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	BCM5222	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
	BCM1100/1101/1112	1X1, Tab down	Zigzag	MJ-11D2GYA1-H33D	MJ016
	BCM1115	1X1, Tab down	Straight	MJ-11S2NNA4-H34L	MJ018
	BCM6345/6348	1X1, Tab down	Zigzag	MJ-11D2NNA0-H33D	MJ016
	BCM5350/5380	1X1, Tab up	Zigzag	MJ-11U2GYA5-H35N	Contact Us
	AC104, BCM5208R	1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
	AC205/206	1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
	BCM5315/5325(M)/5365	2X4, Stack	Zigzag	MJ-24N2NNA0-H14G	MJ024
	BCM5226	2X6, Stack	Zigzag	MJ-26N2NNA0-H14G	MJ024
	AC207/208	2X8, Stack	Zigzag	MJ-28N2NNA0-H14G	MJ024
	BCM5228/5238/5248				
	BCM5318/5338				
	BCM5384				
	BCM5721				
Cirrus Logic	CS8952	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	CS8952T	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
Davicom	DM9161	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	DM9102A	1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
	DM9601	1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
	DM9301/9331	2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026

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IC Cross Reference

Magnetic Integrated Connector Modules
10/100Base-T Applications

10/100BASE-T APPLICATIONS					
IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
IC+	3097-F, 3299A	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	IP100A	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	IP108	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
	IP1726	1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
	IP101	1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2NNA0-H14G	MJ024
		2X6, Stack	Zigzag	MJ-26N2NNA0-H14G	MJ024
		2X8, Stack	Zigzag	MJ-28N2NNA0-H14G	MJ024
ICS	ICS1890/1891	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	ICS1893	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
Infineon (AMD Tek)	PSB21553	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	ADM8511/8513/9511	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	ADM9513, AN983B	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
	AN985B/L autoMDX	1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
	ADM6305	1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
	ADM6308/6326/6509	2X4, Stack	Zigzag	MJ-24N2NNA0-H14G	MJ024
	ADM6609/6909	2X6, Stack	Zigzag	MJ-26N2NNA0-H14G	MJ024
	ADM6996L	2X8, Stack	Zigzag	MJ-28N2NNA0-H14G	MJ024
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
Intel	82551/2551QM/551ER	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	82562/562EZ/550	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	82559/559ER	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
	LXT970A/971(ALC)/972A	1X1, Tab down	Zigzag	MJ-11D2NNA0-H33D	MJ016
	LXT973	1X1, Tab down	Zigzag	MJ-11D2GYA1-H33D	MJ016
	LXT972	1X1, Tab down	Zigzag	MJ-11D2GYA1-H301	MJ001
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us

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10/100Base-T Applications

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IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
Intel (Continued)	LXT974/975	1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
	LXT9761/762/763	1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
	LXT9863	2X4, Stack	Zigzag	MJ-24N2NNA0-H14G	MJ024
	LXT9781/9782/9784	2X6, Stack	Zigzag	MJ-26N2NNA0-H14G	MJ024
	LXT9785/LXT9880	2X8, Stack	Zigzag	MJ-28N2NNA0-H14G	MJ024
LSI	L80223	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	L80225	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	L80227	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
Marvell	88E6021	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	88E6051	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	88E6060/88E6218	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
	88E6052, 88E6063	1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
	88E3081/3082/3083	1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
	88E6083	2X4, Stack	Zigzag	MJ-24N2NNA0-H14G	MJ024
	88E6095	2X6, Stack	Zigzag	MJ-26N2NNA0-H14G	MJ024
		2X8, Stack	Zigzag	MJ-28N2NNA0-H14G	MJ024
MICREL (KENDIN)	KS8721B/21BL/37	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	KS8993/8993M/8993F	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	KS8737	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X1, Tab up	Zigzag	MJ-11U2GYA5-H30Y	MJ004
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
	KS8695P	1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
	KS8995/95M/95MA/95E	1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
	KS8995X	2X4, Stack	Zigzag	MJ-24N2NNA0-H14G	MJ024
	KS8997/KS8998	2X6, Stack	Zigzag	MJ-26N2NNA0-H14G	MJ024
	KS8999	2X8, Stack	Zigzag	MJ-28N2NNA0-H14G	MJ024

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IC Cross Reference

Magnetic Integrated Connector Modules
10/100Base-T Applications

10/100BASE-T APPLICATIONS					
IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
MicroLinear	ML6652	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
Myson	MTD971 MTD972 MTD981	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
Mysticom	MystilPHY110	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
National Semiconductor	DP83847 DP83848 DP83816	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H301	MJ001
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026

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Tel: (852) 2954 3333 • Fax: (852) 2954 3304

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IC Cross Reference

Magnetic Integrated Connector Modules
10/100Base-T Applications

10/100BASE-T APPLICATIONS					
IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
Realtek	RTL8100C/101L/100B	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	RTL8139/B/B/CL	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	RTL8150	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
	RTL8201CL/8201BL	1X1, Tab down	Zigzag	MJ-11D2GYA1-H301	MJ001
	RTL8019AS	1X1, Tab up	Zigzag	MJ-11U2GYA5-H35N	Contact Us
	RTL8208	1X1, Tab up	Zigzag	MJ-11U2GYA5-H30Y	MJ004
	RTL8316	1X1, Tab down	Zigzag	MJ-11D2NNA0-H33D	MJ016
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
		2X4, Stack	Zigzag	MJ-24N2NNA0-H14G	MJ024
		2X6, Stack	Zigzag	MJ-26N2NNA0-H14G	MJ024
		2X8, Stack	Zigzag	MJ-28N2NNA0-H14G	MJ024
SIS	SiS900	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
SMSC	LAN83C183/185	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	LAN91C100FD/110	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
	LAN91C96, LAN91C96I	1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
	LAN91C111	1X1, Tab down	Zigzag	MJ-11D2NNA0-H301	MJ001
	LAN9115	1X1, Tab down	Zigzag	MJ-11D2GYA1-H33D	MJ016
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

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IC Cross Reference

Magnetic Integrated Connector Modules
10/100Base-T Applications

10/100BASE-T APPLICATIONS					
IC Information		Package Information		Cross Reference	
Manufacturer	Part Number	Package Type	Footprint Style	E&E Part Number	Data Sheet
Teridian (TDK)	78P2123	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
	78Q2123	1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
Texas Instruments	TPS2370/2375	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2EEA0-H14N	MJ026
		2X6, Stack	Zigzag	MJ-26N2EEA0-H14N	MJ026
		2X8, Stack	Zigzag	MJ-28N2EEA0-H14N	MJ026
Zarlink (Plessey/Mitel)	MT933	1X1, Tab down	Zigzag	MJ-11D2NNA0-H24J	Contact Us
		1X1, Tab down	Zigzag	MJ-11D2NNA0-H25P	Contact Us
		1X1, Tab down	Straight	MJ-11S2NNA4-H25Q	Contact Us
		1X4, Tab down	Zigzag	MJ-14D2NNA0-H33D	MJ009
		1X4, Tab down	Zigzag	MJ-14D2GYA0-H33D	Contact Us
		2X4, Stack	Zigzag	MJ-24N2NNA0-H14G	MJ026
		2X6, Stack	Zigzag	MJ-26N2NNA0-H14G	MJ026
		2X8, Stack	Zigzag	MJ-28N2NNA0-H14G	MJ026

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

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Selection Guide

Magnetic Integrated Connector Modules

1000 BASE-T APPLICATIONS

Packagte Information				Recommended Designs		
Package Type	Assembly Type	Footprint Style	LED	E&E Part Number	Package Code	Data Sheet
1x1, Tab Down	Through Hole	Zigzag	With LED	MJ-11D2GYA0-G114	MJ11D-04A	MJ116
				MJ-11D2GYA1-G114	MJ11D-04B	MJ116
			Without LED	MJ-11D2NNA0-G114	MJ11D-04C	MJ116
		Straight-row	With LED	MJ-11D2GYA4-G309	MJ11D-05B	MJ117
			Without LED	MJ-11D2NNA4-G309	MJ11D-05A	MJ117
1x1, Tab Up	Through Hole	Zigzag	With LED	MJ-11U2GYA5-G114	MJ11U-04A	MJ114
			Without LED	MJ-11U2NNA0-G114	MJ11U-04B	MJ114
		Straight-row	With LED	MJ-11U2GYA4-G31S	MJ11U-06A	MJ105
			Without LED	MJ-11U2NNA4-G31S	MJ11U-05A	MJ105
1x1, Vertical	Through Hole	Zigzag	With LED	MJ-11V2GYA0-G11U	MJ11V-02B	MJ124
			Without LED	MJ-11V2NNA0-G11K	MJ11V-02A	MJ124
1x4, Tab Down	Through Hole	Zigzag	With LED	MJ-14D2GYA1-G114	MJ14D-03A	MJ104
				MJ-14D2GYA0-G114	MJ14D-03B	MJ104
			Without LED	MJ-14D2NNA0-G114	MJ14D-03C	MJ104
1x4, Tab up	Through Hole	Zigzag	With LED	MJ-14U2GYA5-G114	MJ14U-04A	MJ122
			Without LED	MJ-14U2NNA0-G114	MJ14U-04B	MJ122
		Straight-row	With LED	MJ-14U2GYA4-G31S	MJ14U-06A	MJ108
			Without LED	MJ-14U2NNA4-G31S	MJ14U-05A	MJ108
2x1	Through Hole	Straight-row	With LED	MJ-21N2EEA2-G308	MJ21N-01A	MJ102
2x4	Through Hole	Zigzag	With LED	MJ-24N2EEA0-G100	MJ24N-06A	MJ123
			Without LED	MJ-24N2NNA0-G100	MJ24N-02A	MJ120
2x6	Through Hole	Zigzag	With LED	MJ-26N2EEA0-G100	MJ26N-06A	MJ123
			Without LED	MJ-26N2NNA0-G100	MJ26N-02A	MJ120
2x8	Through Hole	Zigzag	With LED	MJ-28N2EEA0-G100	MJ28N-06A	MJ123
			Without LED	MJ-28N2NNA0-G100	MJ28N-02A	MJ120
RJ-45 + USB(X2)	Through Hole	Straight-row	With LED	MC-11A2GYA4-G118	MC11A-03A	Contact Us

1000 BASE-T APPLICATIONS (WITH POE FEATURE)

Packagte Information				Recommended Designs		
Package Type	Assembly Type	Footprint Style	LED	E&E Part Number	Package Code	Data Sheet
2x4	Through Hole	Vertical	With LED	MJ-24N2EEA3-E7102	MJ24N-07B	MJ125
			Without LED	MJ-24N2NNA2-E7102	MJ24N-04A	MJ118
2x6	Through Hole	Vertical	With LED	MJ-26N2EEA3-E7102	MJ26N-07B	MJ125
			Without LED	MJ-26N2NNA2-E7102	MJ26N-04A	MJ118
2x8	Through Hole	Vertical	With LED	MJ-28N2EEA3-E7102	MJ28N-07B	MJ125
			Without LED	MJ-28N2NNA2-E7102	MJ28N-04A	MJ118

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

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Selection Guide

Magnetic Integrated Connector Modules

10/100 BASE-T APPLICATIONS						
Packagte Information				Recommended Designs		
Package Type	Assembly Type	Footprint Style	LED	E&E Part Number	Package Code	Data Sheet
1x1, Tab Down	Through Hole	Zigzag	With LED	MJ-11D2GYA0-H33D	MJ11D-01A	MJ016
				MJ-11D2GYA1-H33D	MJ11D-01B	MJ016
			Without LED	MJ-11D2NNA0-H33D	MJ11D-01C	MJ016
	SMD	Straight-row	Without LED	MJ-11S2NNA4-H34L	MJ11S-01A	MJ018
1x1, Tab Up	Through Hole	Zigzag	With LED	MJ-11U2GYA5-H30Y	MJ11U-01A	MJ004
			Without LED	MJ-11U2NNA0-H30Y	MJ11U-01B	MJ004
		Straight-row	With LED	MJ-11U2GYA4-H34K	MJ11U-03A	MJ007
			Without LED	MJ-11U2NNA4-H34K	MJ11U-02A	MJ006
1x1, Vertical	Through Hole	Zigzag	With LED	MJ-11V2GYA0-H30Y	MJ11V-01B	MJ019
			Without LED	MJ-11V2NNA0-H30Y	MJ11V-01A	MJ019
1x4, Tab Down	Through Hole	Zigzag	With LED	MJ-14D2GYA1-H33D	MJ14D-01A	MJ009
			Without LED	MJ-14D2NNA0-H33D	MJ14D-01C	MJ009
1x4, Tab up	Through Hole	Zigzag	With LED	MJ-14U2GYA5-H30Y	MJ14U-01A	MJ023
			Without LED	MJ-14U2NNA0-H30Y	MJ14U-01B	MJ023
		Straight-row	Without LED	MJ-14U2NNA4-H34K	MJ14U-02A	MJ013
1x5, Tab Down	Through Hole	Zigzag	With LED	MJ-15D2GYA1-H33D	MJ15D-01A	Contact Us
				MJ-15D2GYA0-H33D	MJ15D-01B	Contact Us
			Without LED	MJ-15D2NNA0-H33D	MJ15D-01C	Contact Us
2x1	Through Hole	Zigzag	Without LED	MJ-21N2NNA0-H10Y	MJ21N-02A	Contact Us
				MJ-21N2NNA2-H35G	MJ21N-03A	Contact Us
		Vertical	With LED	MJ-21N2EEA2-H35G	MJ21N-03B	Contact Us
2x4	Through Hole	Zigzag	With LED	MJ-24N2EEA0-H14N	MJ24N-05A	MJ026
			Without LED	MJ-24N2NNA0-H14N	MJ24N-01A	MJ024
2x6	Through Hole	Zigzag	With LED	MJ-26N2EEA0-H14N	MJ26N-05A	MJ026
			Without LED	MJ-26N2NNA0-H14N	MJ26N-01A	MJ024
2x8	Through Hole	Zigzag	With LED	MJ-28N2EEA0-H14N	MJ28N-05A	MJ026
			Without LED	MJ-28N2NNA0-H14N	MJ28N-01A	MJ024
RJ-45 + USB(X2)	Through Hole	Straight-row	With LED	MC-11A2GYA4-H34U	MC11A-02A	MJ022

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

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Selection Guide
Magnetic Integrated Connector Modules

10/100 BASE-T APPLICATIONS (WITH POE FEATURE)						
Packagte Information				Recommended Designs		
Package Type	Assembly Type	Footprint Style	LED	E&E Part Number	Package Code	Data Sheet
1X1, Tab Down	Through Hole	Straight-row	With LED	MJ-11D2GYA9-VB121	MJ11D-06A	MJ028
			Without LED	MJ-11D2NNA9-VB121	MJ11D-06B	MJ028
1X1, Tab Up	Through Hole	(Special)	With LED	MJ-11U2GYA8-VB110	MJ11U-09B	MJ027
			Without LED	MJ-11U2NNA8-VB110	MJ11U-09A	MJ027
2X4	Through Hole	Zigzag	Without LED	MJ-24N2NNA0-V70N	MJ24N-03A+0	MJ021
2X6	Through Hole	Zigzag	Without LED	MJ-26N2NNA0-V70N	MJ26N-03A+0	MJ021
2X8	Through Hole	Zigzag	Without LED	MJ-28N2NNA0-V70N	MJ28N-03A+0	MJ021

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Tel: (852) 2954 3333 • Fax: (852) 2954 3304

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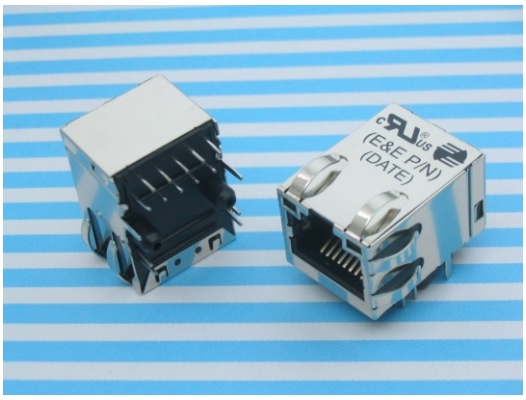
1000Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs of Category 5 UTP cable with 1000 Base-T full duplex applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR11U2GYA5-G101	1CT:1CT	TC	G / Y	MJ11U-01A	G101
MJR11U2GYA5-G110	1CT:1CT	TC	G / Y	MJ11U-01A	G110
MJR11U2GYA5-G114	1CT:1CT	TC	G / Y	MJ11U-01A	G114
MJR11U2NNA0-G101	1CT:1CT	TC	—	MJ11U-01B	G101
MJR11U2NNA0-G110	1CT:1CT	TC	—	MJ11U-01B	G110
MJR11U2NNA0-G114	1CT:1CT	TC	—	MJ11U-01B	G114

Notes:

1. Ordering Information: MJR11U2GYA5-abbbc/MJR11U2NNA0-abbbc.

   MJR11U2GYA5 = Product Type (xxRxxxxxxxx, R respresent Internal Control Code).

   MJR11U2NNA0 = Product Type (xxRxxxxxxxx, R respresent Internal Control Code).

   abbb = Schematic code.

   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).

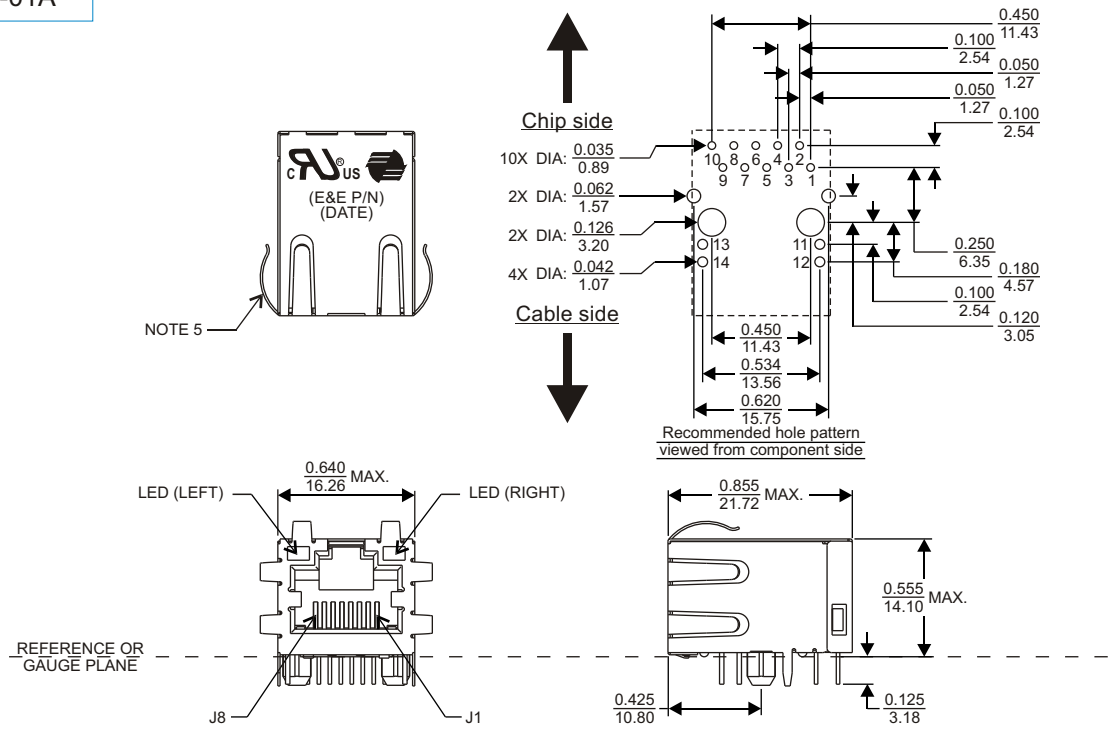
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
5. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; "–" = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

1000Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ11U-01A



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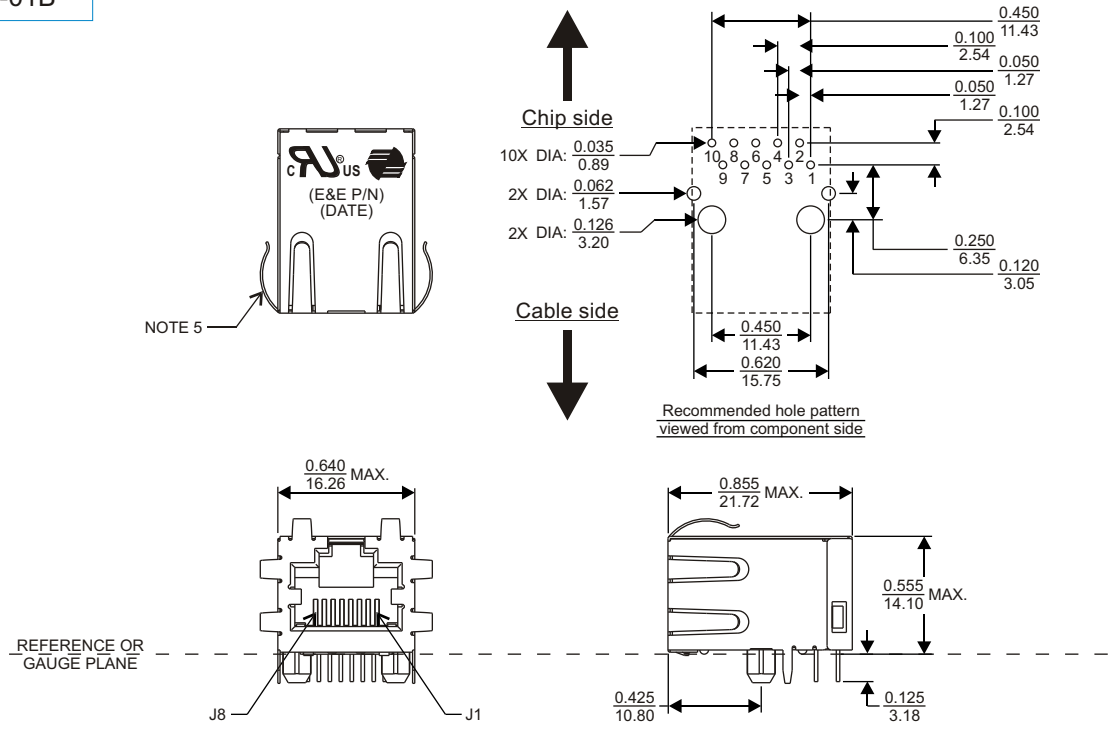

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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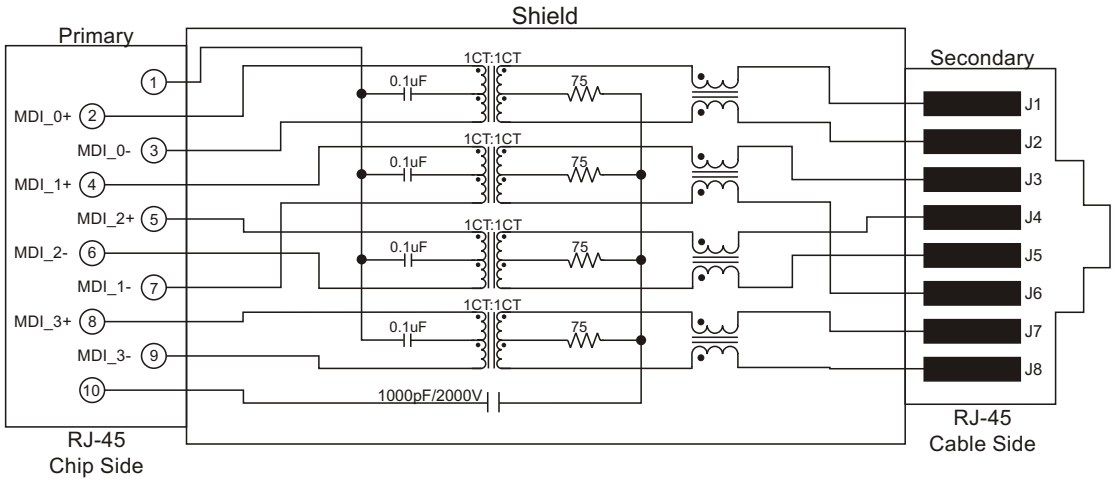
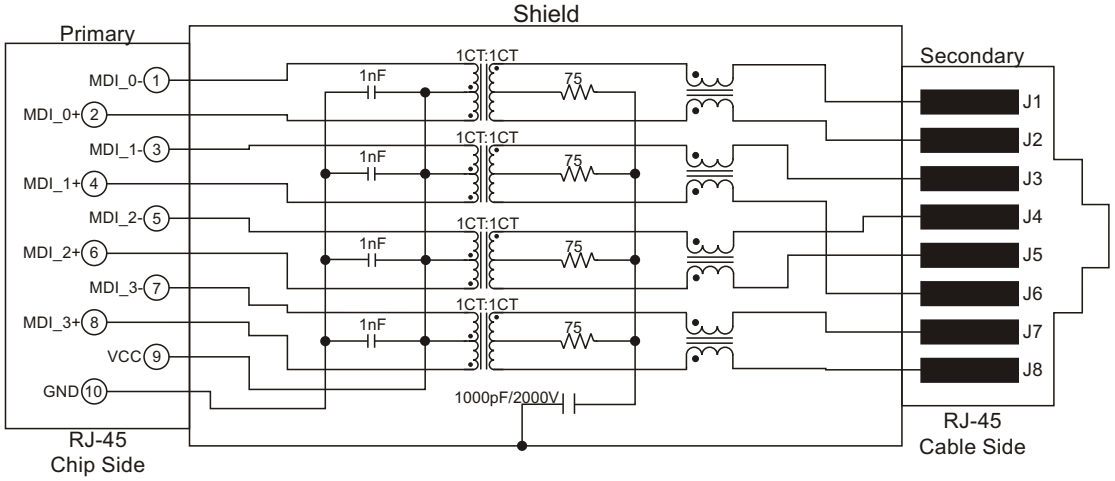
1000Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

SCHEMATICS

G101



G110



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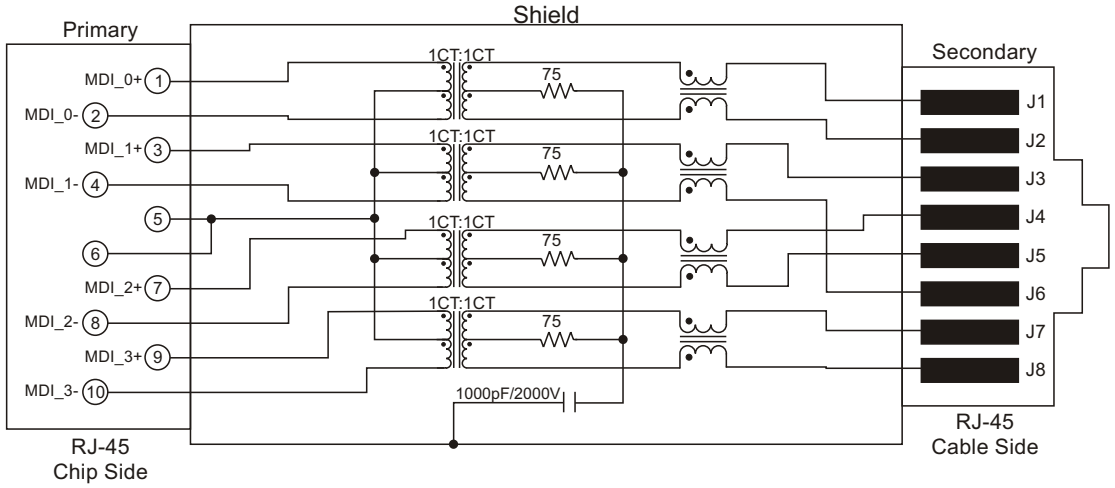

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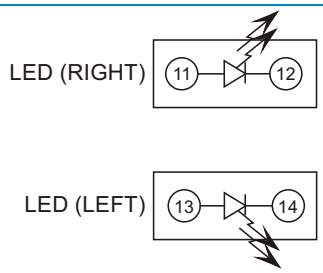
E & E Magnetic Products Limited

1000Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

LEDs Color And Polarity

MJ11U-01A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 13	PIN 14		PIN 11	PIN 12
	GREEN	+	—	YELLOW	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
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Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
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Elec & Eltek依利安達
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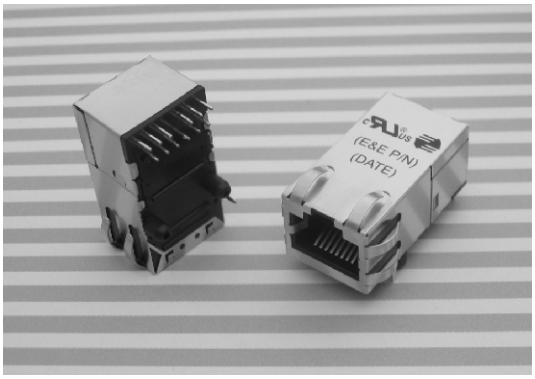
1000 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs fo Category 5 UTP cable with 1000Base-T full duplex applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss[2] (dB Min)		CMRR (dB Min)	Crosstalk[2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number[3]	Turn Ratio (±3%) (Chip : Cable)	Configuration[4]	LED[5] (Left / Right)	Mechanical Package	Schematic
MJR11U2GYA4-G109	1CT:1CT	TC	G / Y	MJ11U-06A	G109
MJR11U2GYA4-G11S	1CT:1CT	TC	G / Y	MJ11U-06A	G11S
MJR11U2GYA4-G309	1CT:1	TCA	G / Y	MJ11U-06A	G309
MJR11U2GYA4-G31S	1CT:1	TCA	G / Y	MJ11U-06A	G31S
MJR11U2NNA4-G109	1CT:1CT	TC	—	MJ11U-05A	G109
MJR11U2NNA4-G11S	1CT:1CT	TC	—	MJ11U-05A	G11S
MJR11U2NNA4-G309	1CT:1	TCA	—	MJ11U-05A	G309
MJR11U2NNA4-G31S	1CT:1	TCA	—	MJ11U-05A	G31S

Notes:

1. Ordering Information: MJR11U2GYA4-abbbc/MJR11U2NNA4-abbbc.
   - MJR11U2GYA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11U2NNA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G109/G11S/G309/G31S).
   - c = Packaging Code (No Code = Non tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
5. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; "–" = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
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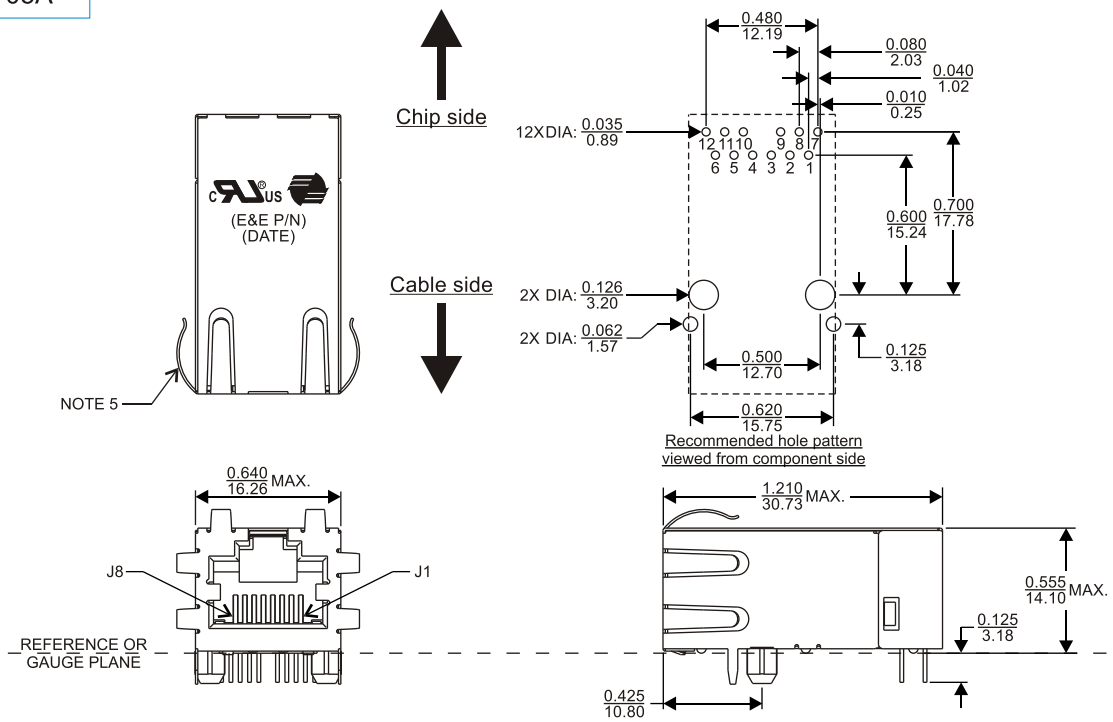
Elec & Eltek依利安達
E & E Magnetic Products Limited

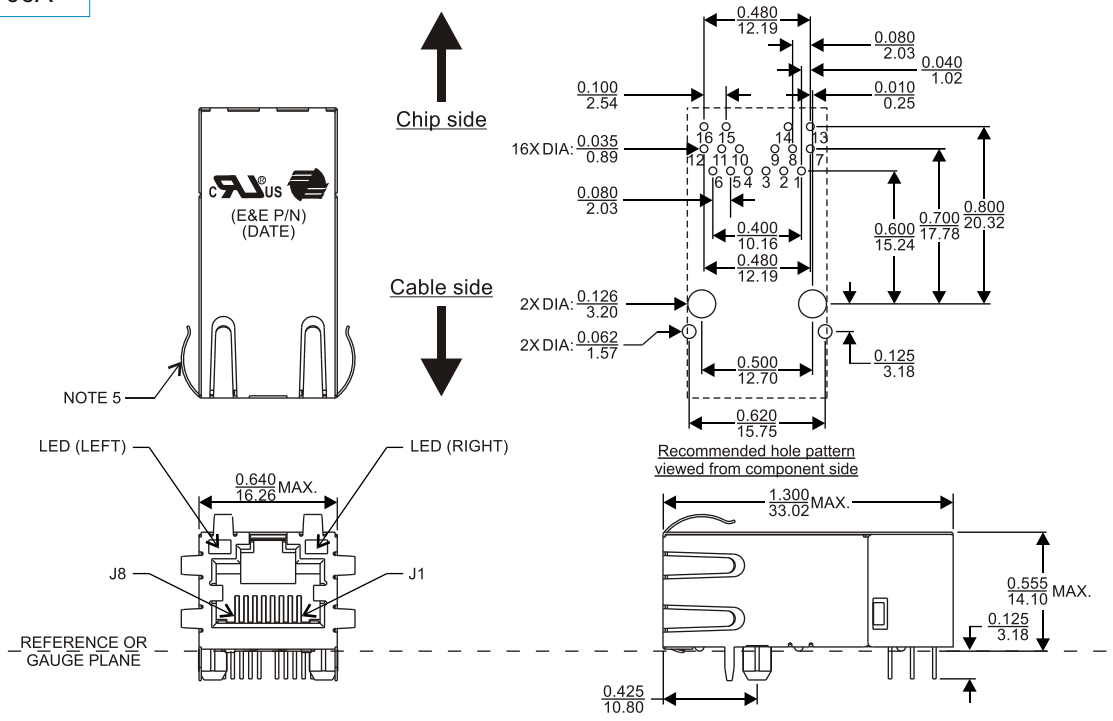
1000 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern

MECHANICAL DIMENSIONS

MJ11U-05A



MJ11U-06A



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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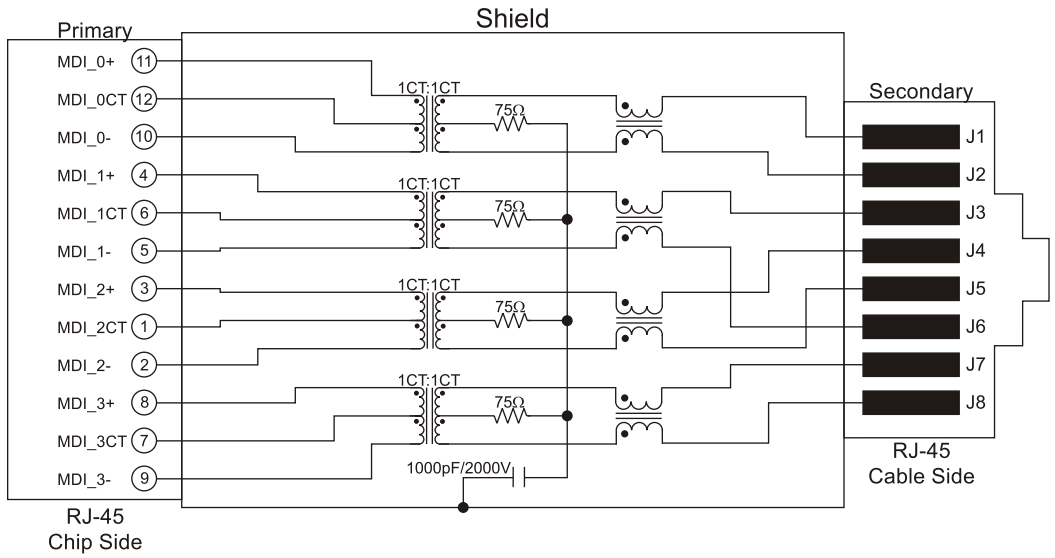
E & E Magnetic Products Limited

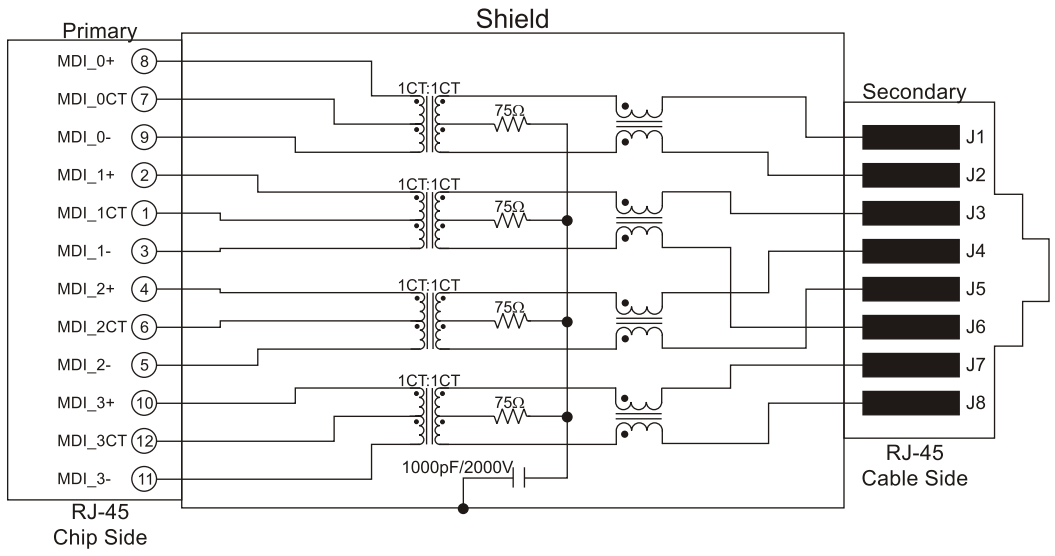
1000 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern

SCHEMATICS

G109



G11S



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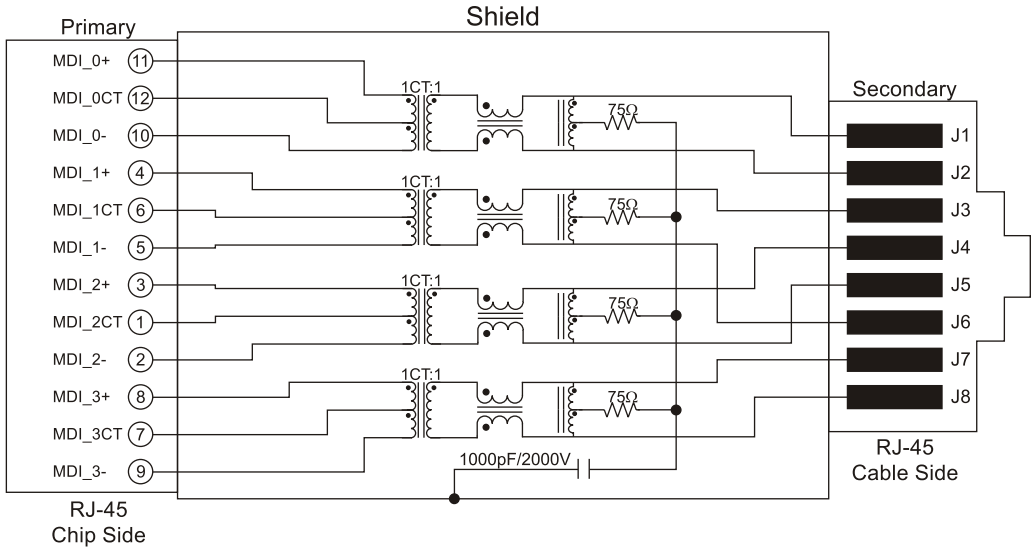

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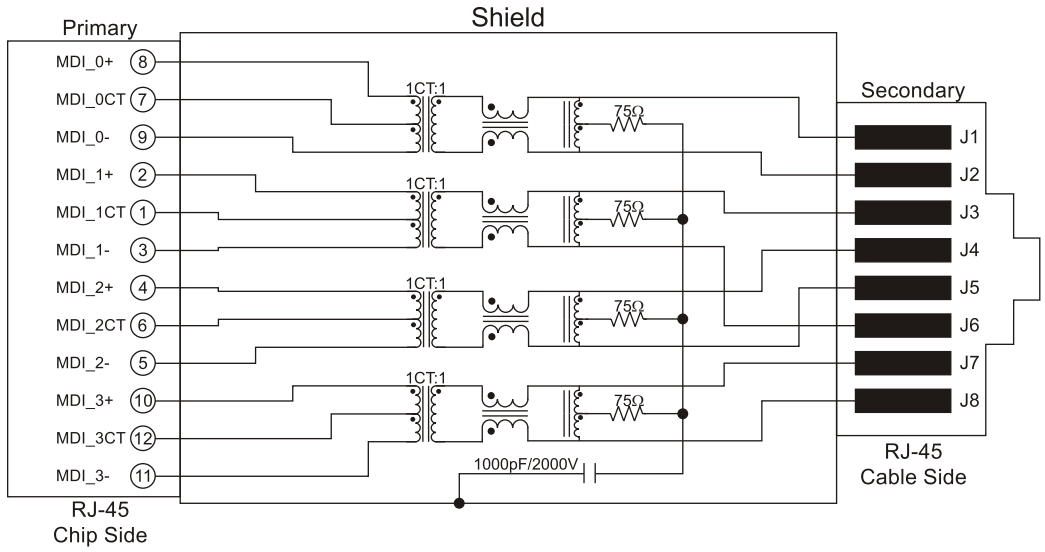
1000 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern

SCHEMATICS

G31S



LEDs COLOR AND POLARITY

MJ11U-06A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 16	PIN 15		PIN 14	PIN 13
LED (RIGHT) 13 14 / LED (LEFT) 15 16	GREEN	+	—	YELLOW	+	—

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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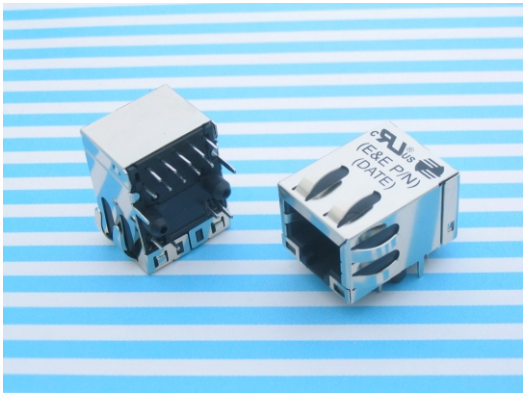
E & E Magnetic Products Limited

1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (8 cores designs)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs fo Category 5 UTP cable with 1000Base-T full duplex applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR11D2GYA0-G100	1CT:1CT	TC	G / Y	MJ11D-04A	G100
MJR11D2GYA0-G101	1CT:1CT	TC	G / Y	MJ11D-04A	G101
MJR11D2GYA0-G114	1CT:1CT	TC	G / Y	MJ11D-04A	G114
MJR11D2GYA1-G100	1CT:1CT	TC	G / Y	MJ11D-04B	G100
MJR11D2GYA1-G101	1CT:1CT	TC	G / Y	MJ11D-04B	G101
MJR11D2GYA1-G114	1CT:1CT	TC	G / Y	MJ11D-04B	G114
MJR11D2NNA0-G100	1CT:1CT	TC	—	MJ11D-04C	G100
MJR11D2NNA0-G101	1CT:1CT	TC	—	MJ11D-04C	G101
MJR11D2NNA0-G114	1CT:1CT	TC	—	MJ11D-04C	G114

Notes:

1. Ordering Information: MJR11D2GYA0-abbbc/MJR11D2GYA1-abbbc/MJR11D2NNA0-abbbc.
   - MJR11D2GYA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11D2GYA1 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11D2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G100/G101/G114).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke .
5. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; " – " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

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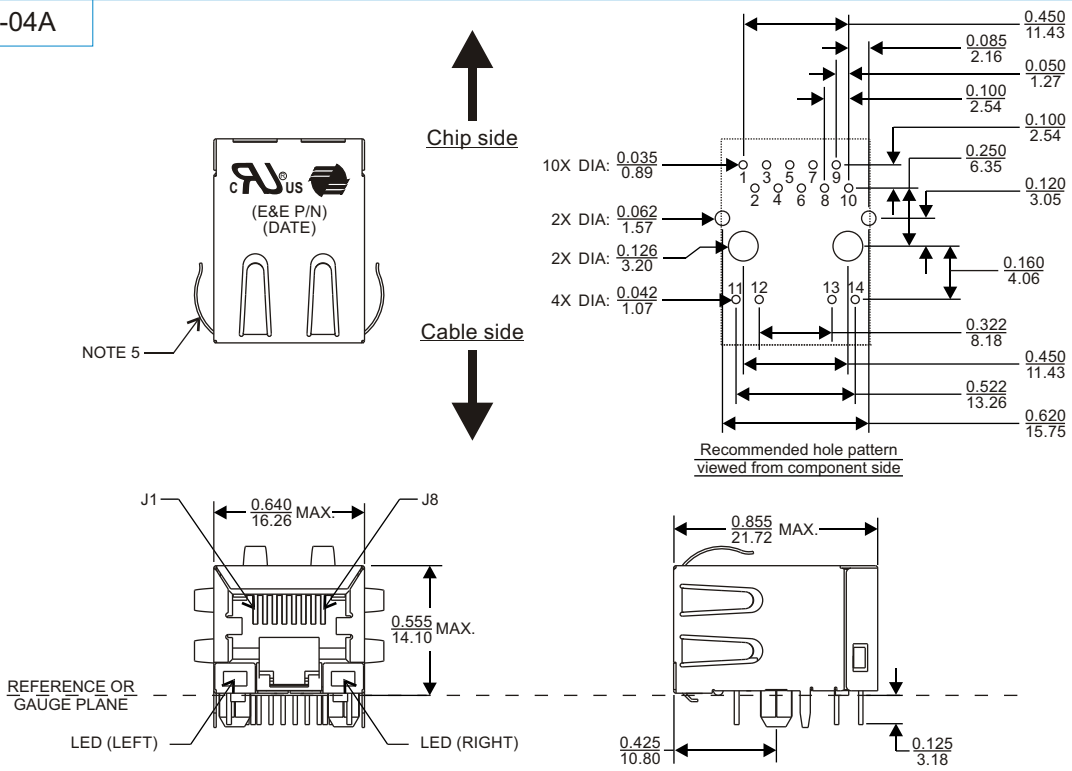
E & E Magnetic Products Limited

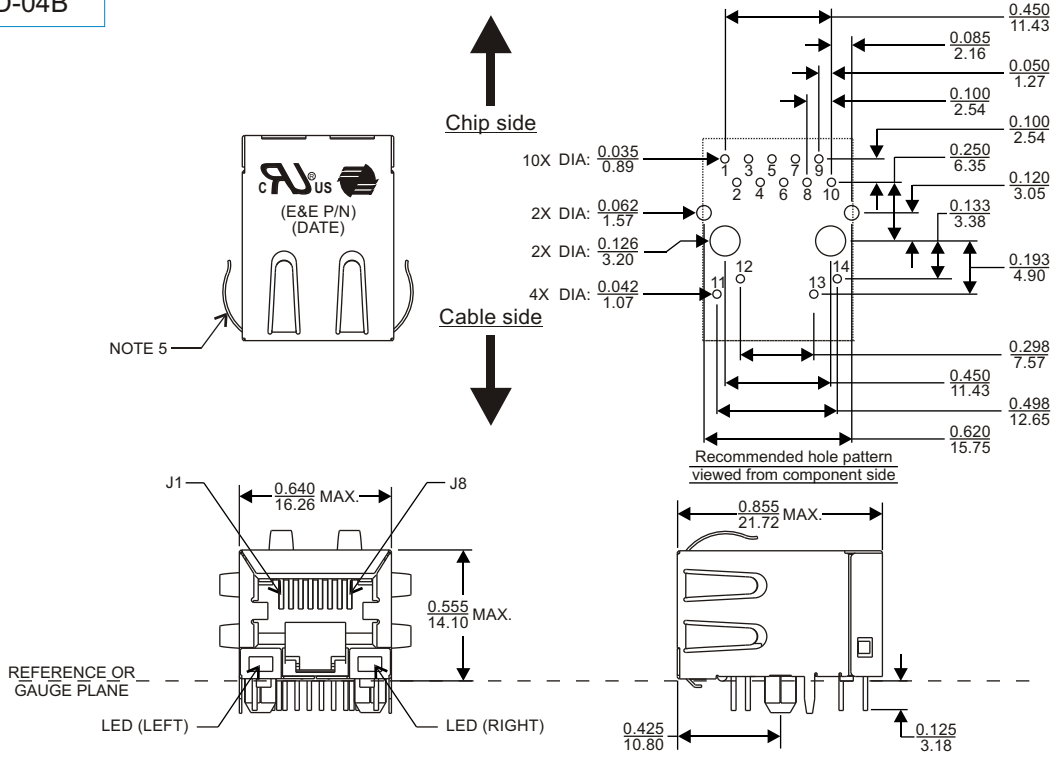
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (8 cores designs)

MECHANICAL DIMENSIONS

MJ11D-04A



MJ11D-04B



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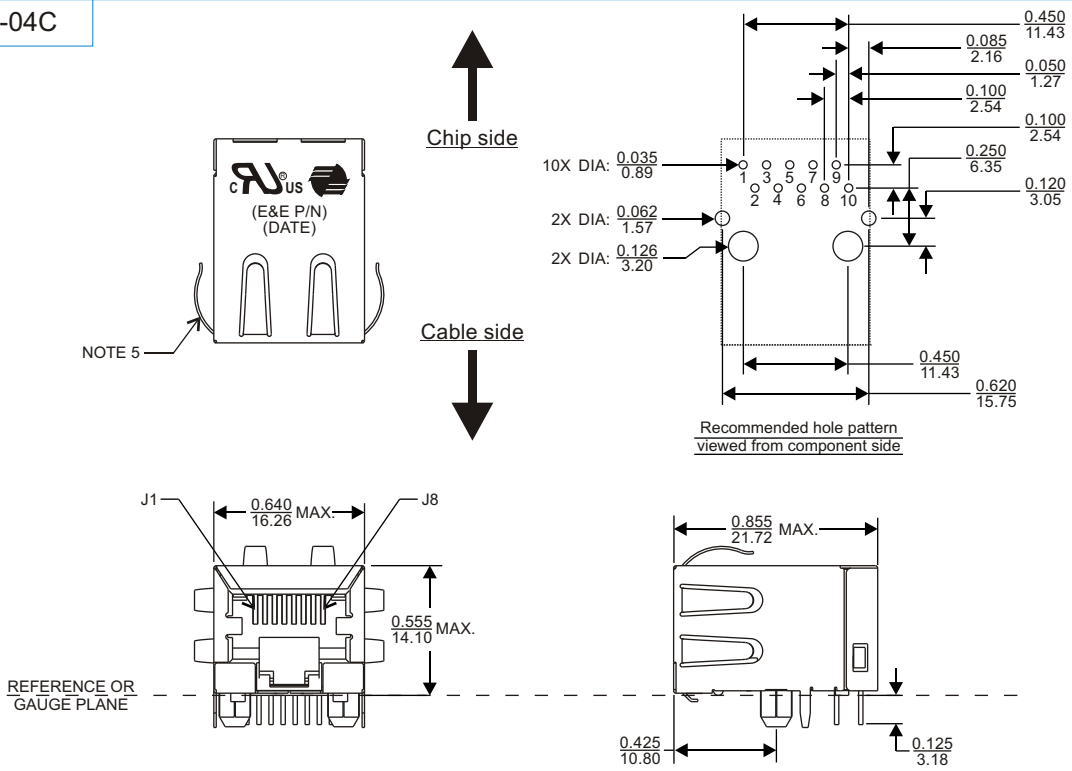
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (8 cores designs)

MECHANICAL DIMENSIONS

MJ11D-04C



All dimensions are specified in inch / mm with higher precedence in inch.

Unless otherwise specified, all tolerances are ± 0.010 / 0.25.

MATERIALS

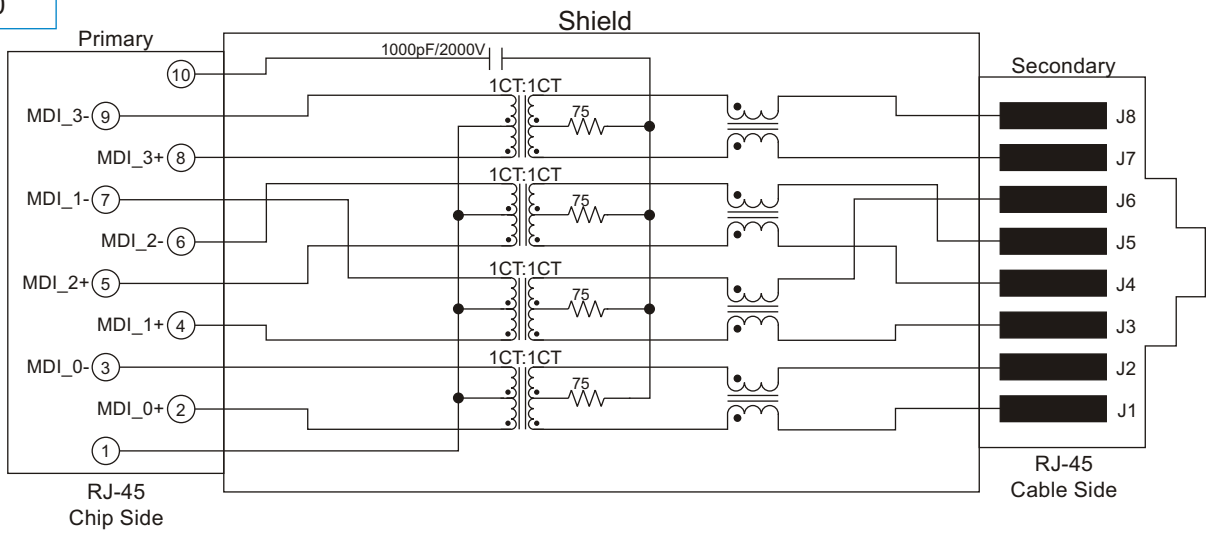
Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (8 cores designs)

SCHEMATICS

G100



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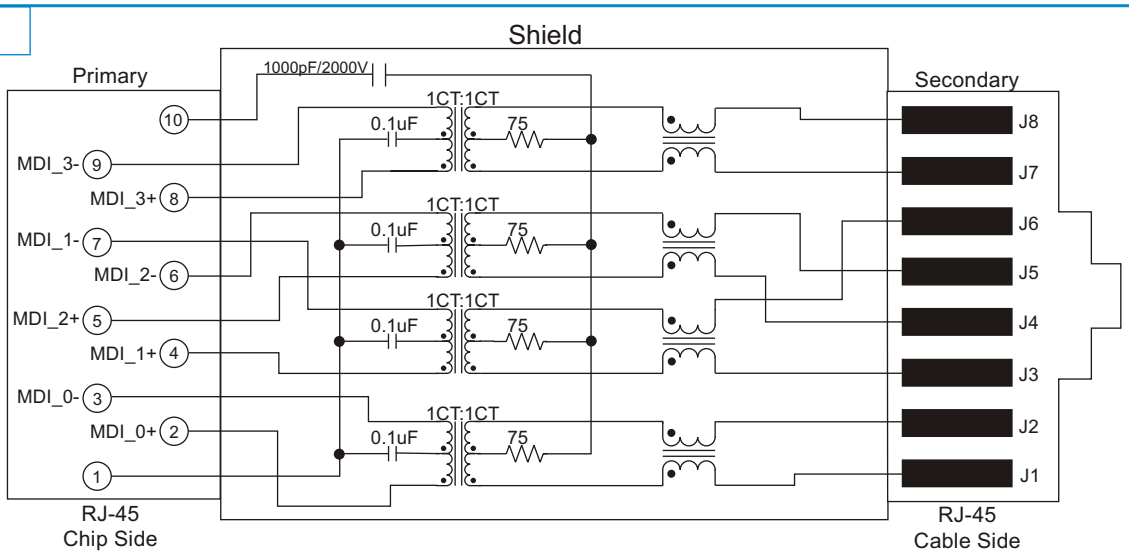
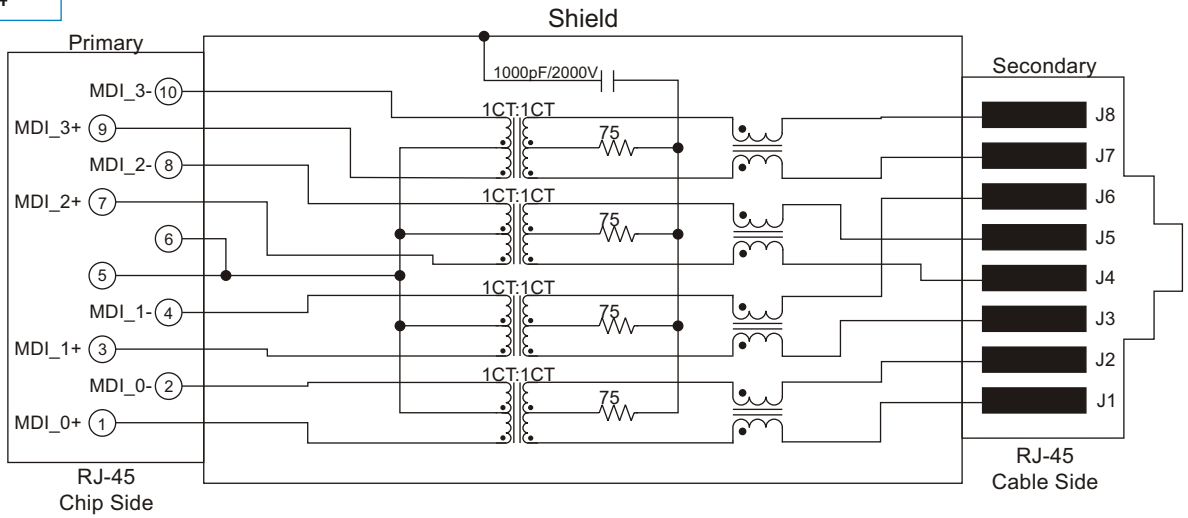


G114



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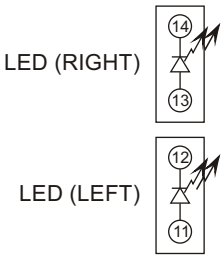
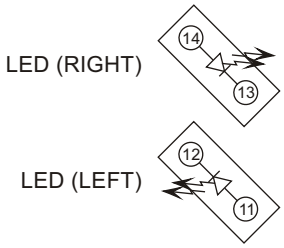
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (8 cores designs)

LEDs Color And Polarity

MJ11D-04A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 13	PIN 14
	GREEN	+	—	YELLOW	+	—

LEDs Color And Polarity

MJ11D-04B	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 14	PIN 13
	GREEN	+	—	YELLOW	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

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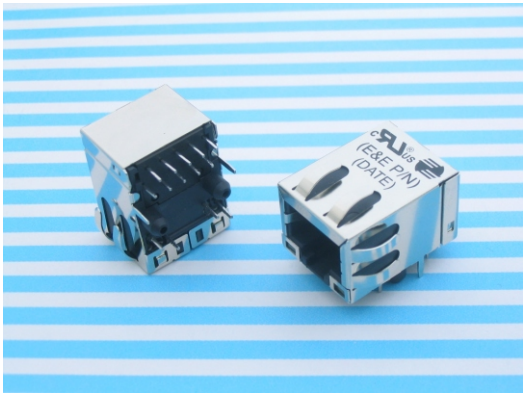
E & E Magnetic Products Limited

1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (12 cores designs)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs fo Category 5 UTP cable with 1000Base-T full duplex applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR11D2GYA0-G300	1CT:1	TCA	G / Y	MJ11D-04A	G300
MJR11D2GYA0-G301	1CT:1	TCA	G / Y	MJ11D-04A	G301
MJR11D2GYA0-G314	1CT:1	TCA	G / Y	MJ11D-04A	G314
MJR11D2GYA1-G300	1CT:1	TCA	G / Y	MJ11D-04B	G300
MJR11D2GYA1-G301	1CT:1	TCA	G / Y	MJ11D-04B	G301
MJR11D2GYA1-G314	1CT:1	TCA	G / Y	MJ11D-04B	G314
MJR11D2NNA0-G300	1CT:1	TCA	—	MJ11D-04C	G300
MJR11D2NNA0-G301	1CT:1	TCA	—	MJ11D-04C	G301
MJR11D2NNA0-G314	1CT:1	TCA	—	MJ11D-04C	G114

Notes:

1. Ordering Information: MJR11D2GYA0-abbbc/MJR11D2GYA1-abbbc/MJR11D2NNA0-abbbc.
   - MJR11D2GYA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11D2GYA1 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11D2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G300/G301/G314).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; 'C" = Common-mode choke ; "A" = Auto-transformer
5. LEDs (Left / Right) : 'G" = Green ; "Y" = Yellow ; " – " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

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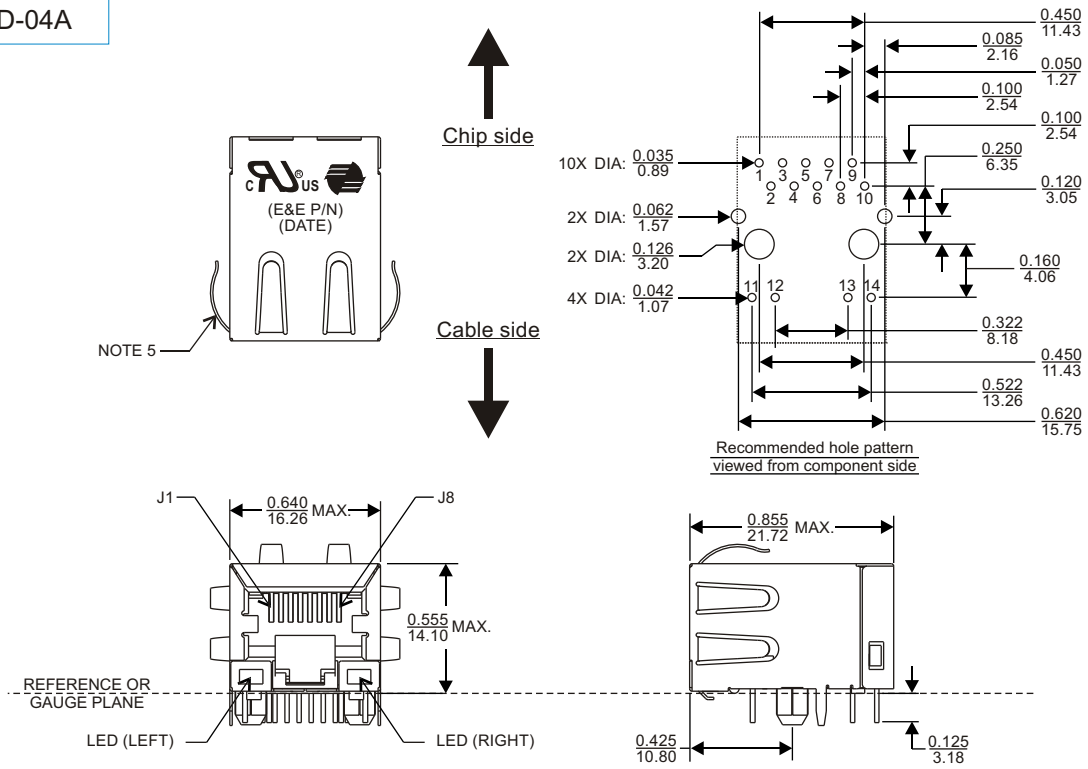
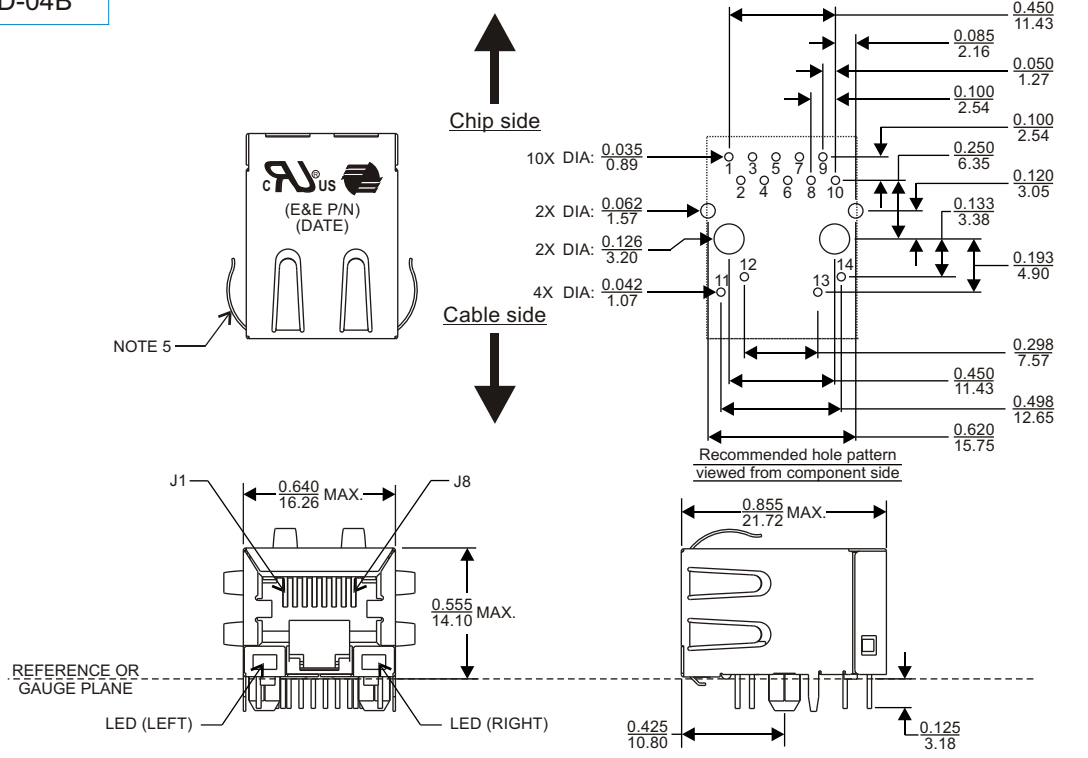
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (12 cores designs)

MECHANICAL DIMENSIONS

MJ11D-04A



MJ11D-04B



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

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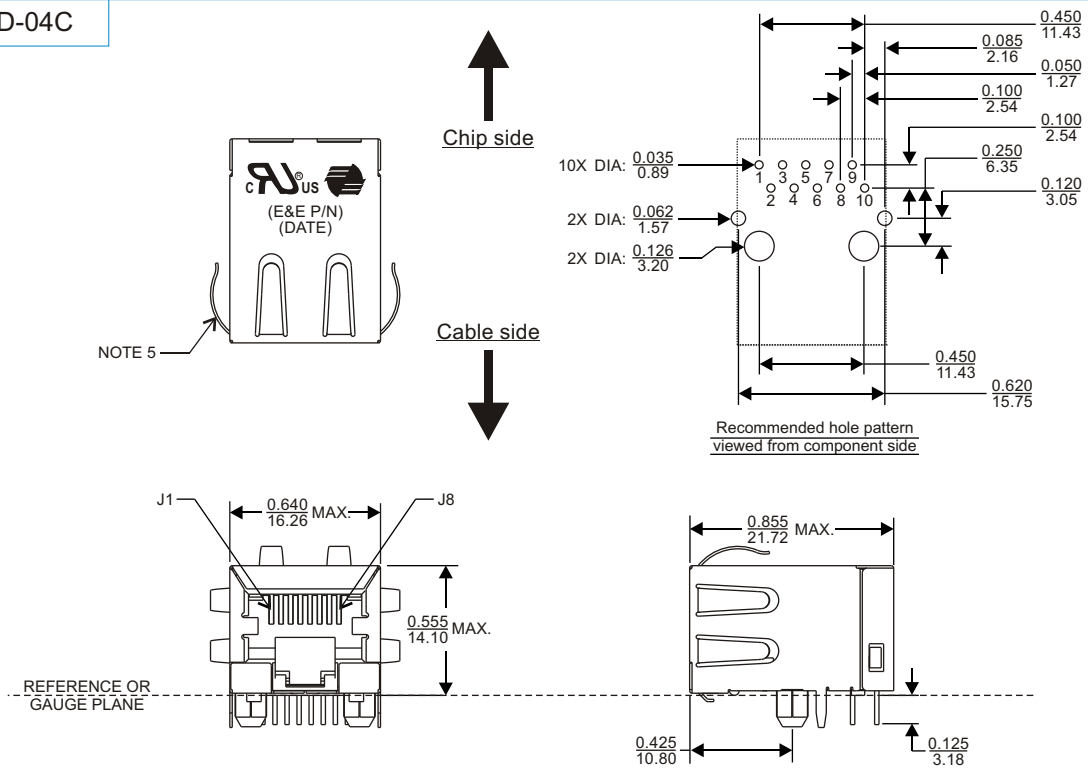
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (12 cores designs)

MECHANICAL DIMENSIONS

MJ11D-04C



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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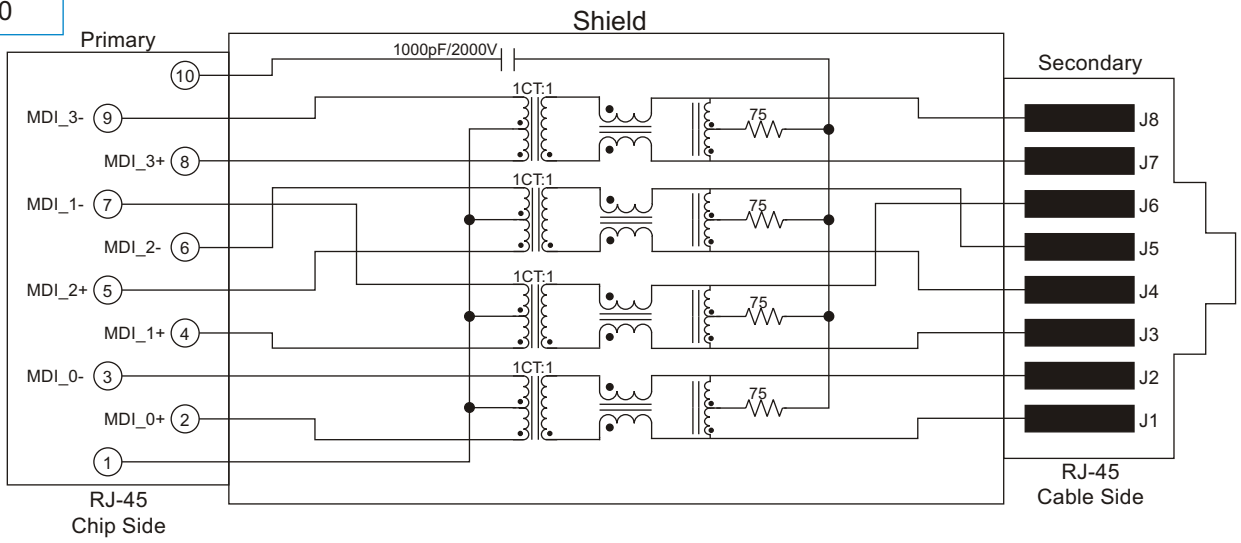
E & E Magnetic Products Limited

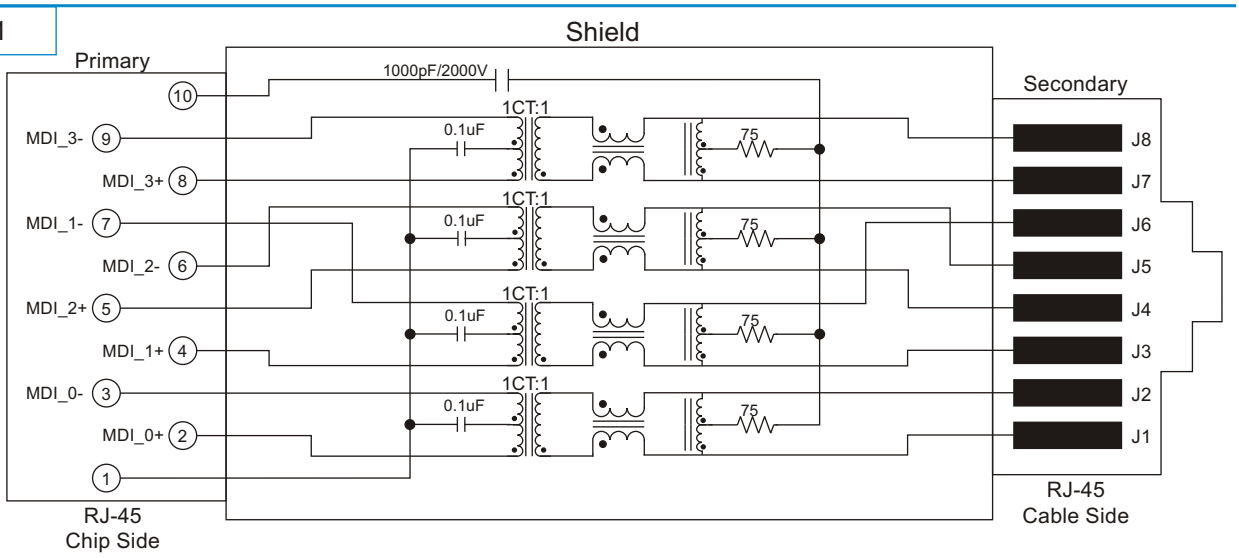
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (12 cores designs)

SCHEMATICS

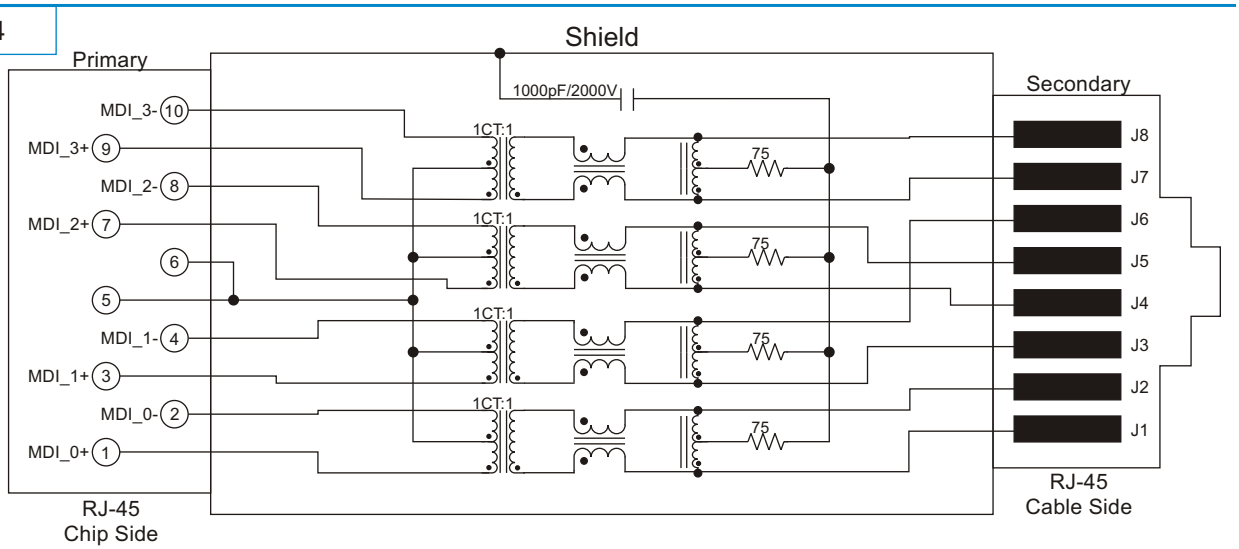
G300



G301



G314



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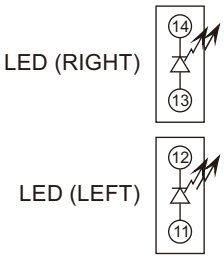
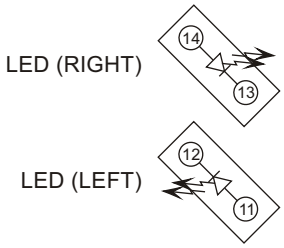
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (12 cores designs)

LEDs Color And Polarity

MJ11D-04A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 13	PIN 14
	GREEN	+	—	YELLOW	+	—

LEDs Color And Polarity

MJ11D-04B	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 14	PIN 13
	GREEN	+	—	YELLOW	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
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Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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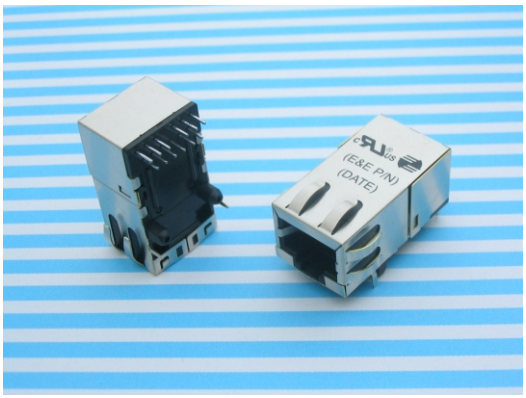
E & E Magnetic Products Limited

1000 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs fo Category 5 UTP cable with 1000Base-T full duplex applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR11D2NNA4-G109	1CT:1CT	TC	—	MJ11D-05A	G109
MJR11D2NNA4-G309	1CT:1	TCA	—	MJ11D-05A	G309
MJR11D2GYA7-G109	1CT:1CT	TC	G / Y	MJ11D-05B	G109
MJR11D2GYA7-G309	1CT:1	TCA	G / Y	MJ11D-05B	G309

Notes:

1. Ordering Information: MJR11D2NNA4-abbbc/MJR11D2GYA7-abbbc.
   - MJR11D2NNA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11D2GYA7 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G109/G309).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; 'C" = Common-mode choke ; "A" = Auto-transformer
5. LEDs (Left / Right) : 'G" = Green ; "Y" = Yellow ; " – " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

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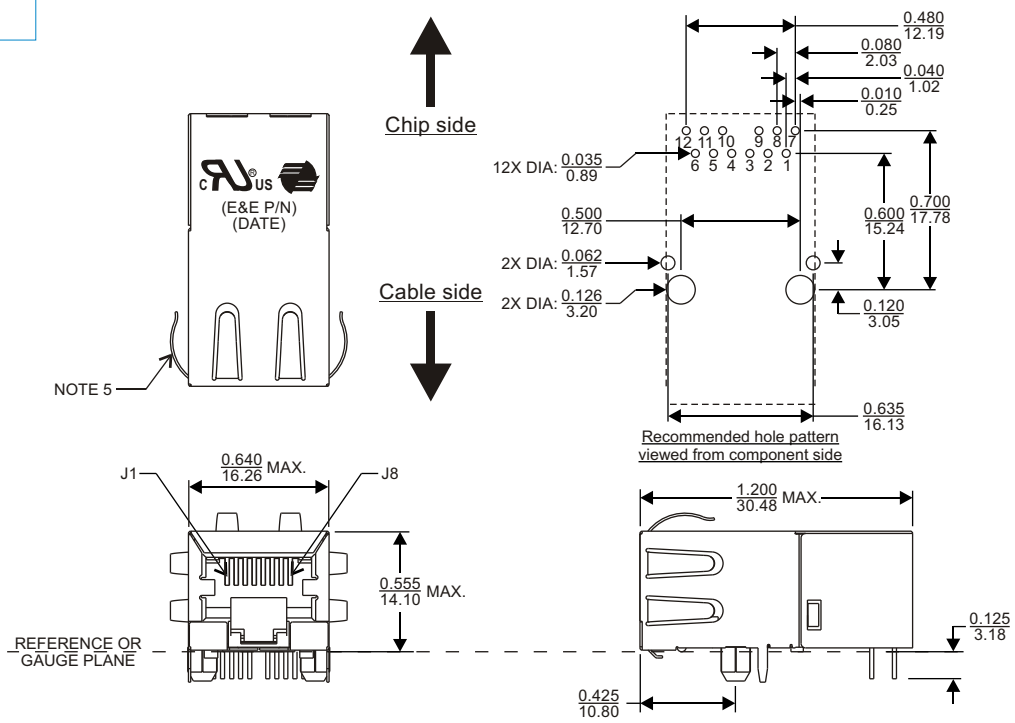
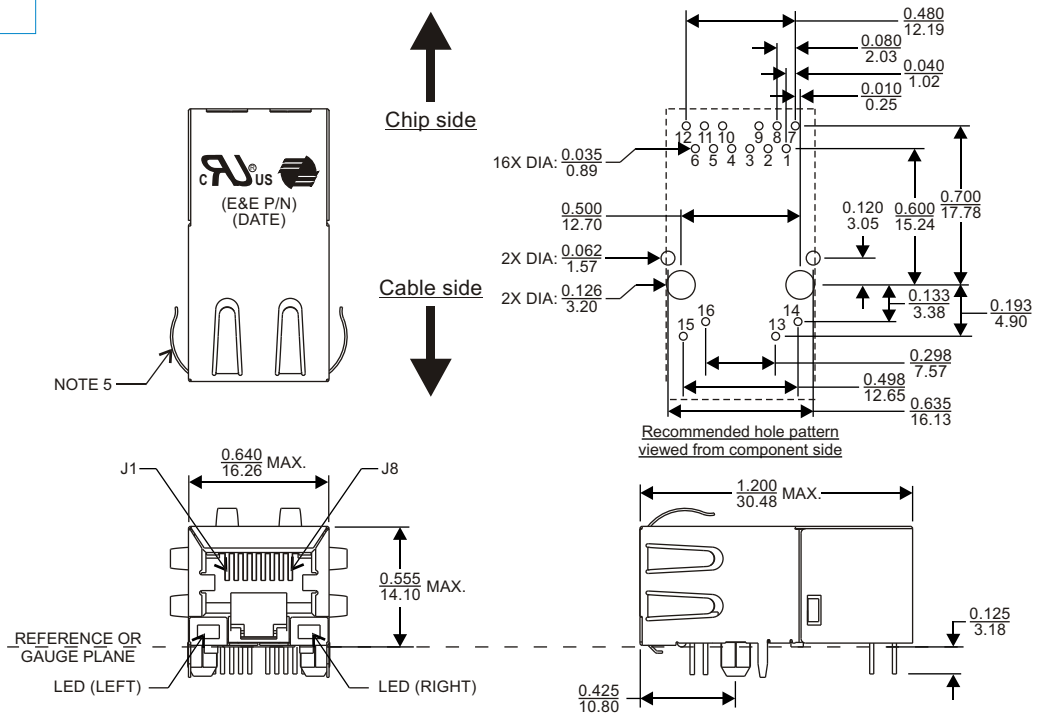
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern

MECHANICAL DIMENSIONS

MJ11D-05A



MJ11D-05B



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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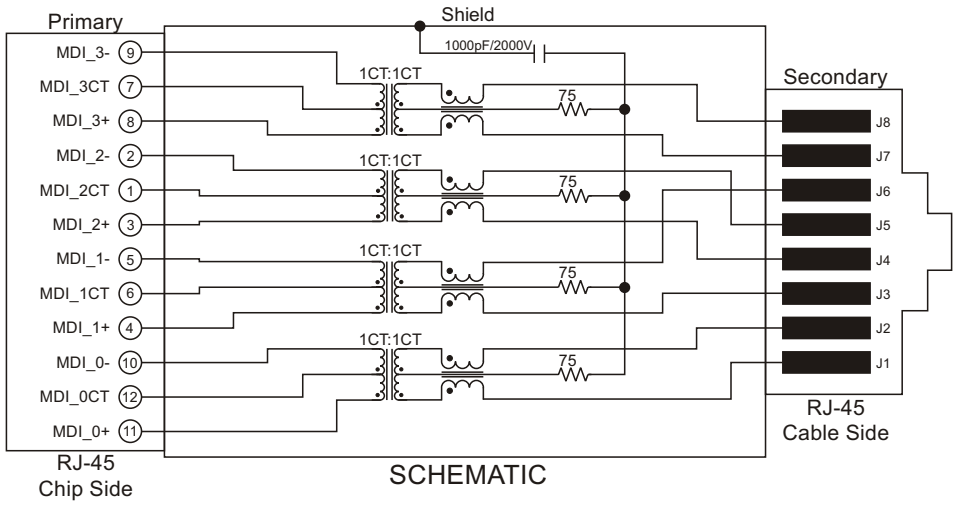
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern

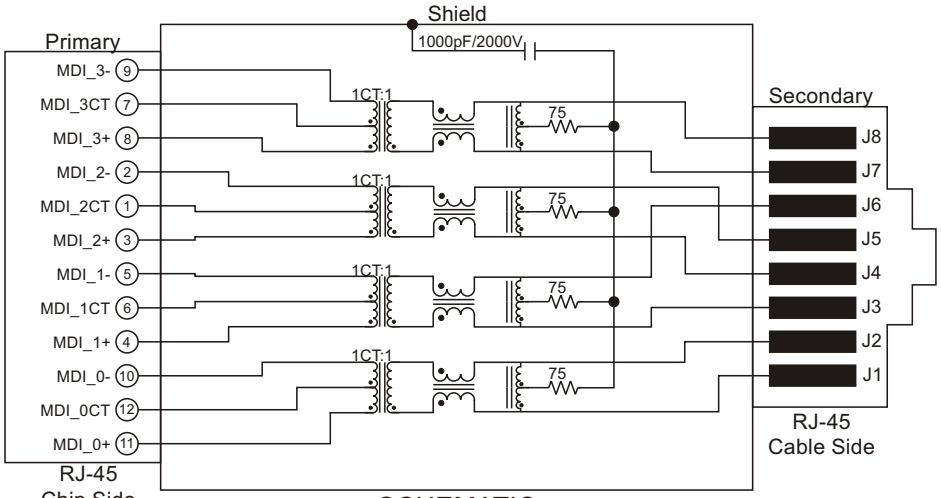
SCHEMATICS

G109



SCHEMATIC

G309



SCHEMATIC

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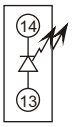
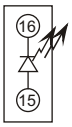
1000 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern

LEDs Color And Polarity

MJ11U-06A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 16	PIN 15		PIN 14	PIN 13
LED (RIGHT)  LED (LEFT) 	GREEN	—	+	YELLOW	—	+

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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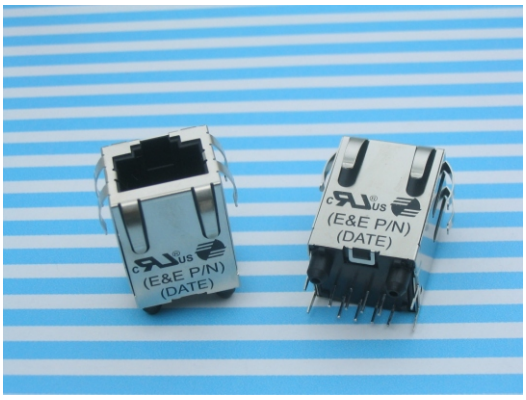
E & E Magnetic Products Limited

1000 Base-T Applications
Single Port, Through Hole, Vertical
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs of Category 5 UTP cable with 1000 Base-T full duplex applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR11V2NNA0-G11K	1CT:1CT	TC	—	MJ11V-02A	G11K
MJR11V2GYA0-G11U	1CT:1CT	TC	G / Y	MJ11V-02B	G11U

Notes:

1. Ordering Information: MJR11V2NNA0-abbbc/MJR11V2GYA0-abbbc.
   - MJR11V2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11V2GYA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G11K/G11U).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; 'C" = Common-mode choke ; "A" = Auto-transformer
5. LEDs (Left / Right) : 'G" = Green ; "Y" = Yellow ; " – " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

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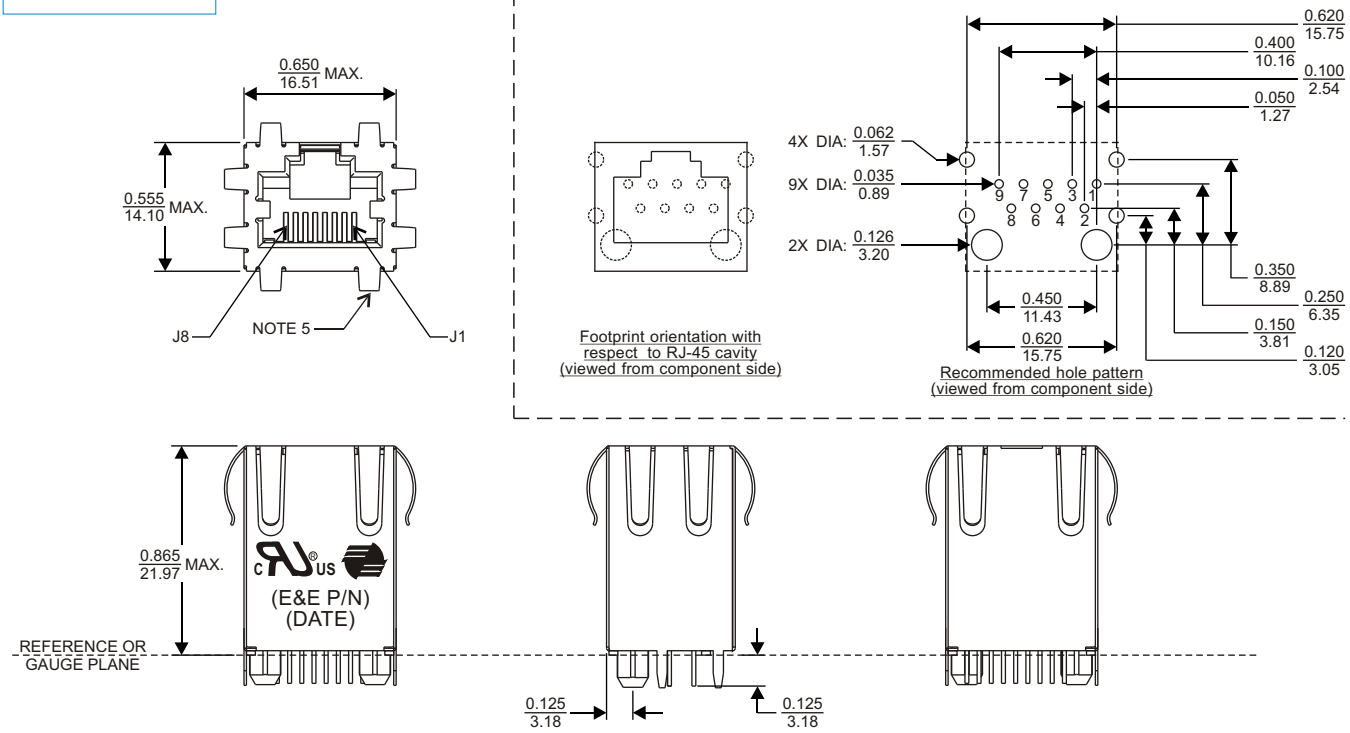
E & E Magnetic Products Limited

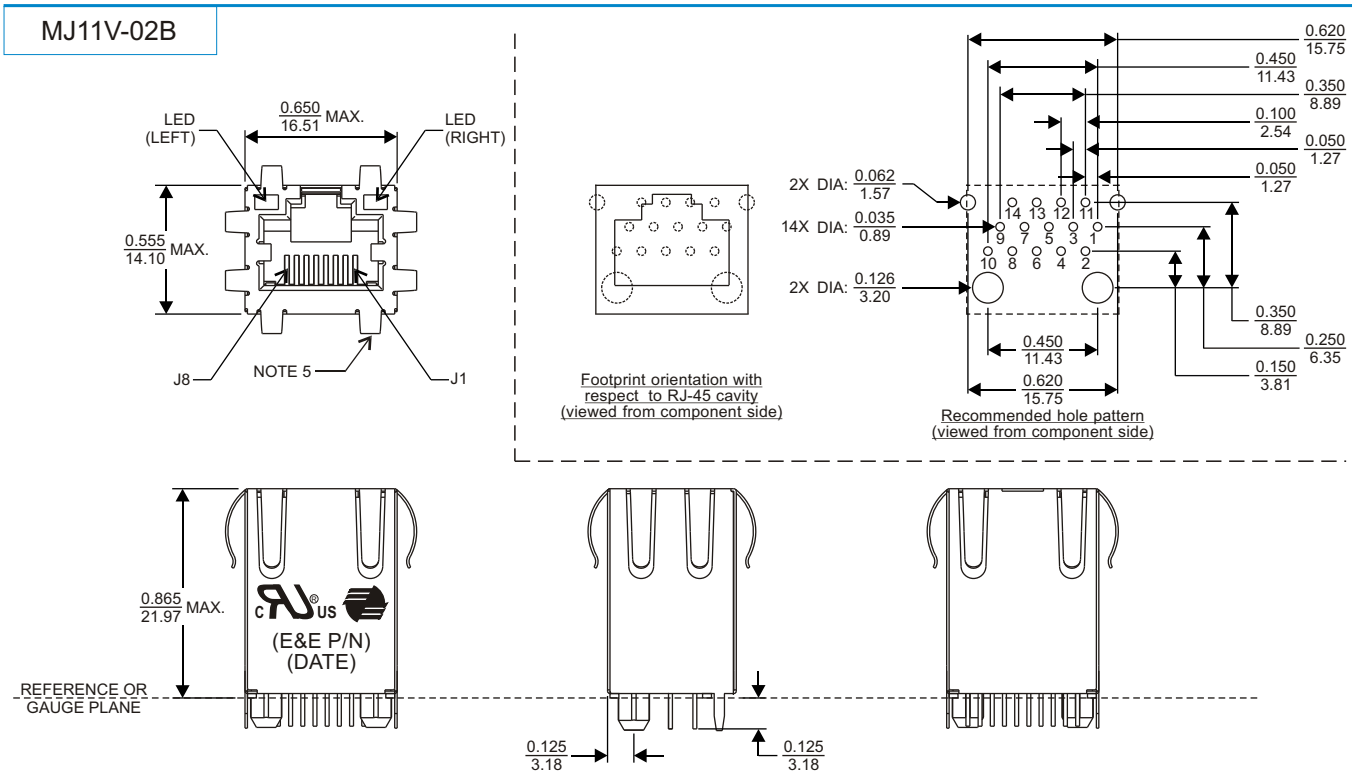
1000 Base-T Applications
Single Port, Through Hole, Vertical
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ11V-02A



MJ11V-02B



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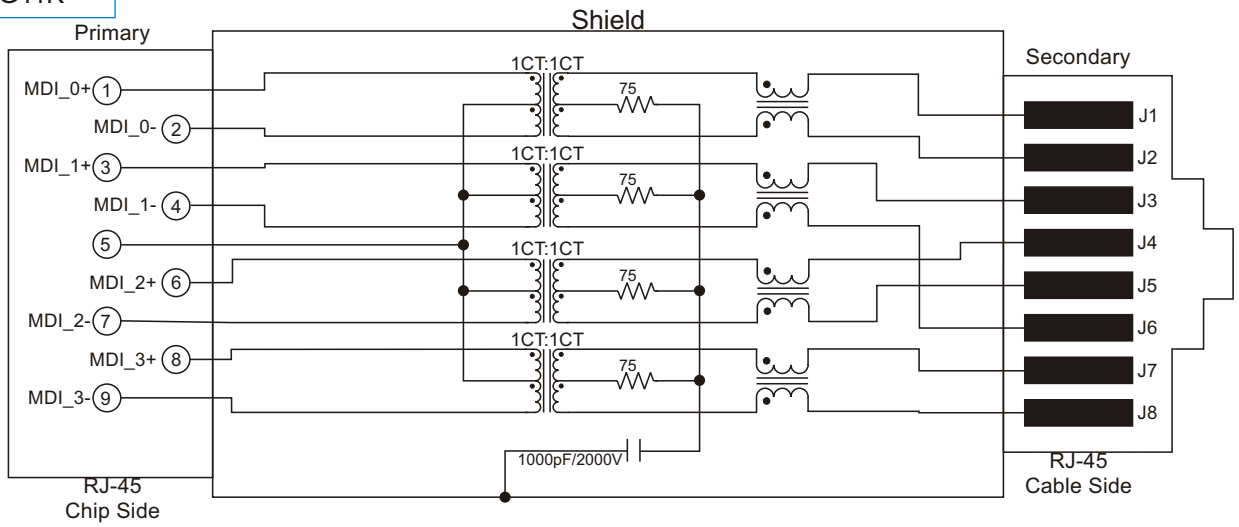
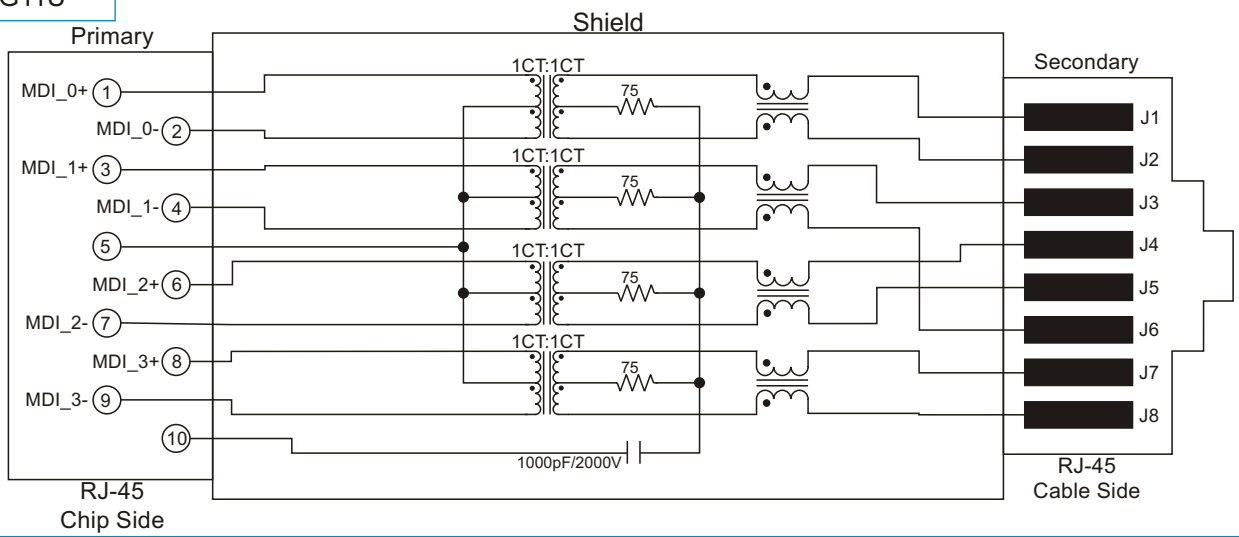
1000 Base-T Applications
Single Port, Through Hole, Vertical
Zigzag Output Pins Pattern

SCHEMATICS

G11K



G11U



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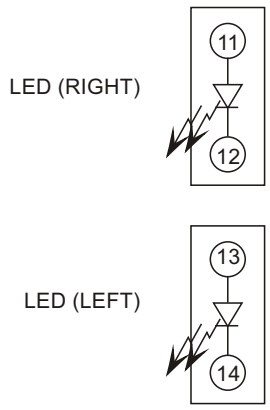
1000 Base-T Applications
Single Port, Through Hole, Vertical
Zigzag Output Pins Pattern

LEDs Color And Polarity

MJ11V-02B	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 13	PIN 14		PIN 11	PIN 12
	GREEN	+	—	YELLOW	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

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1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
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Website: http://www.eleceltek.com / www.eemagnetic.com

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E & E Magnetic Products Limited

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs fo Category 5 UTP cable with 1000Base-T full duplex applications
- Gang 1x4 design for Hub and Switch Applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR14U2GYA5-G114	1CT:1CT	TC	G / Y	MJ14U-04A	G114
MJR14U2NNA0-G114	1CT:1CT	TC	—	MJ14U-04B	G114

Notes:

1. Ordering Information: MJR14U2GYA5-abbbc/MJR14U2NNA0-abbbc.
   - MJR14U2GYA5 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR14U2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G114).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where: "T" = Isolation transformer ; 'C" = Common-mode choke .
5. LEDs (Left / Right) : 'G" = Green ; "Y" = Yellow ; " – " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins [7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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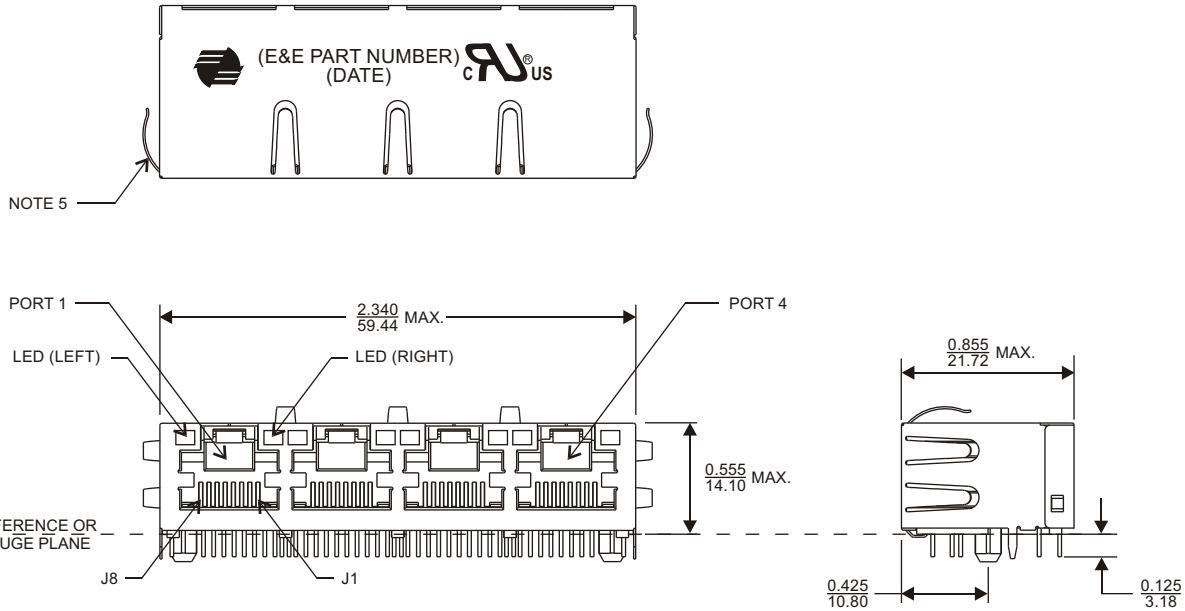
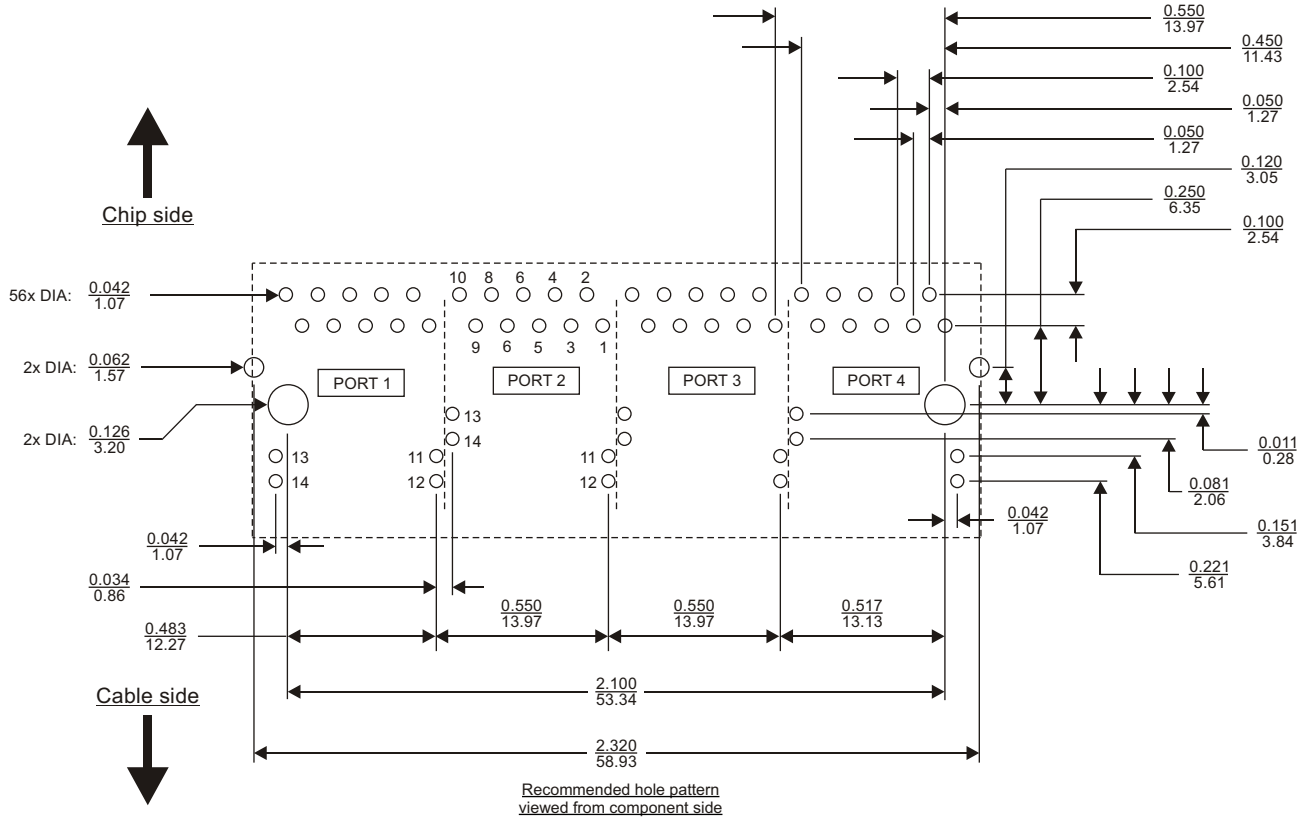
1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14U-04A





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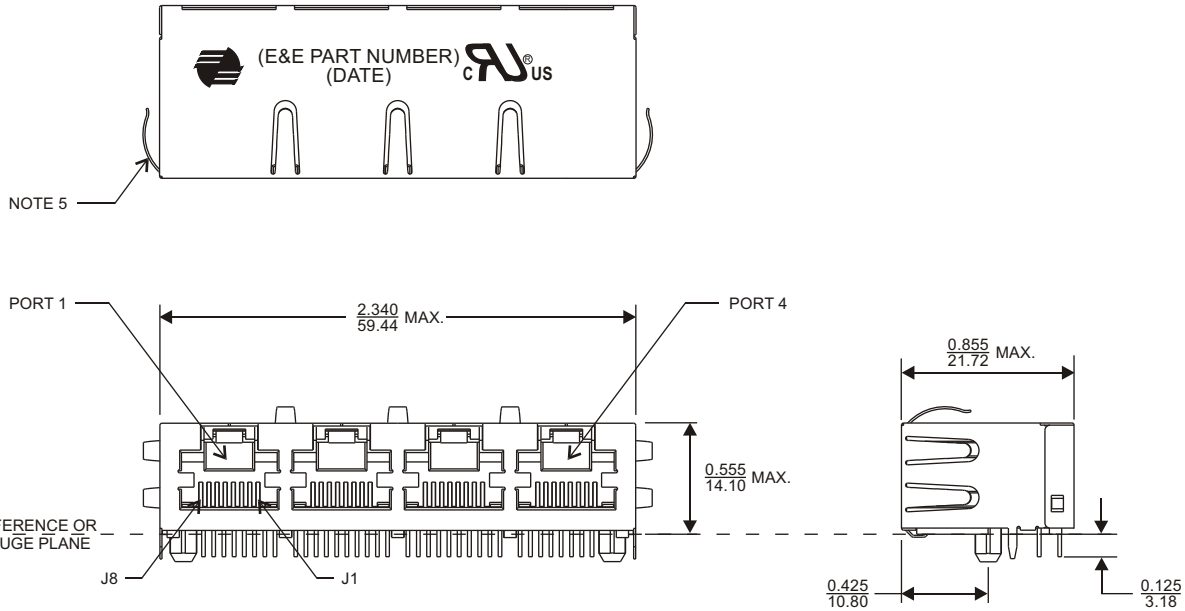
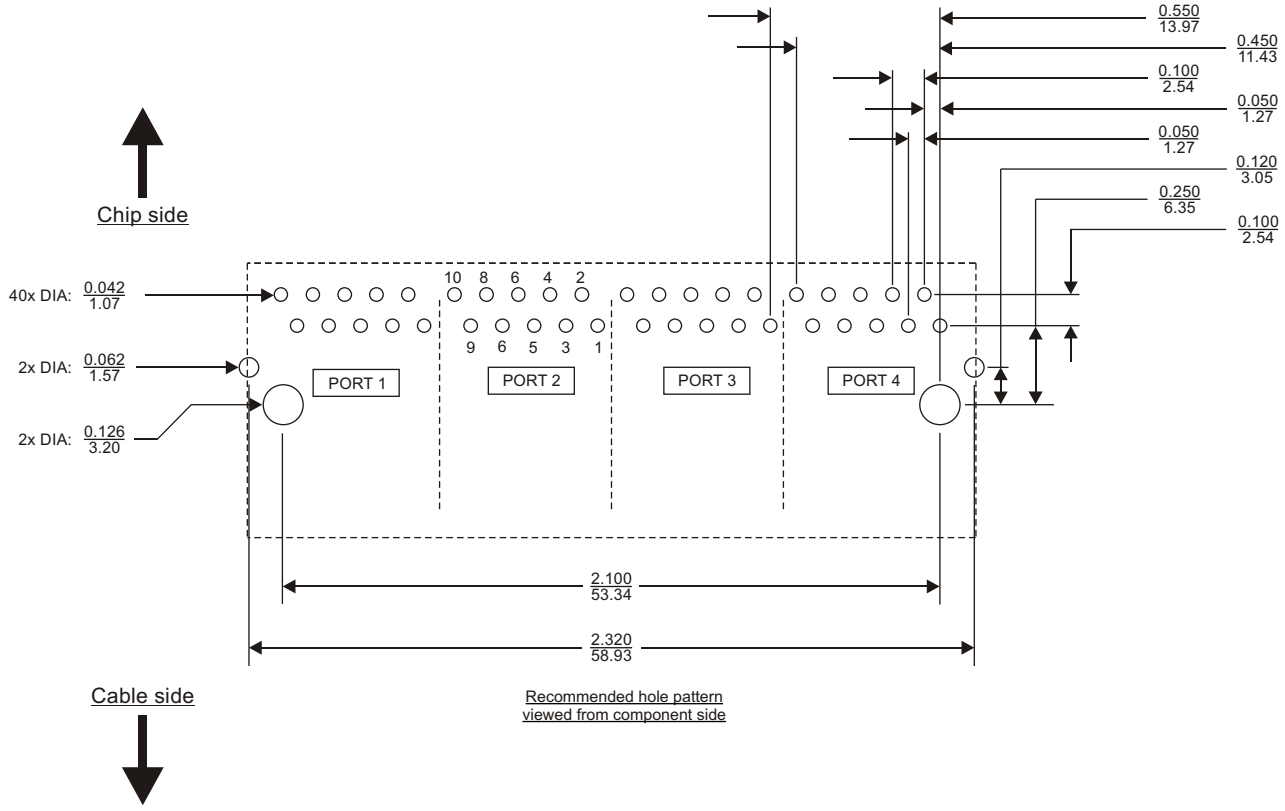
1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14U-04B





All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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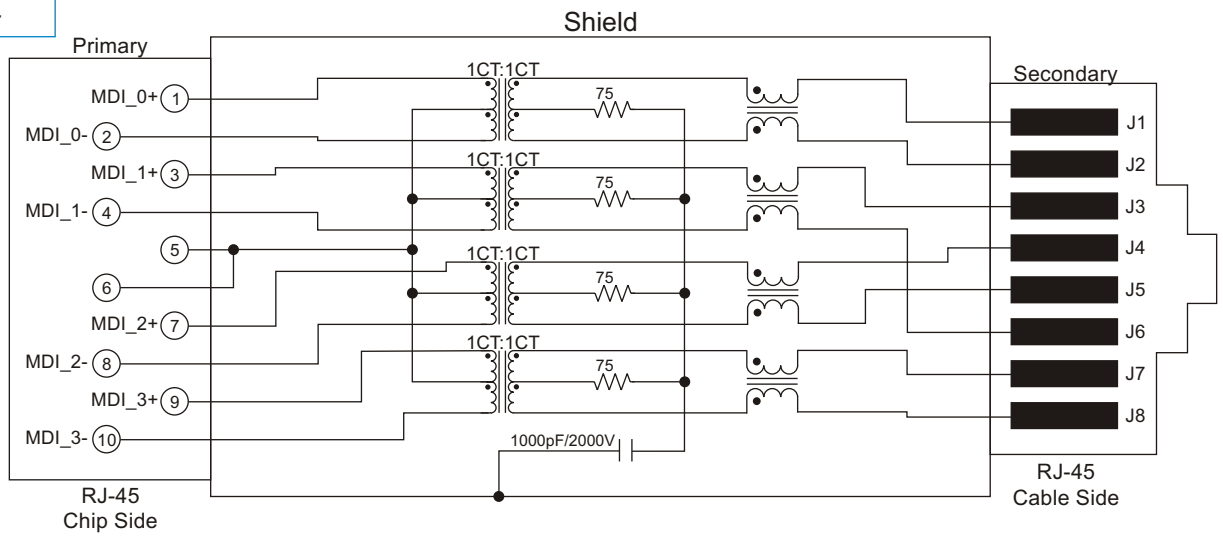
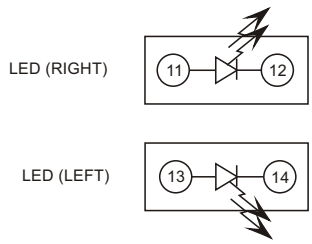
1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

SCHEMATICS

G114



LEDs COLOR AND POLARITY

MJ14U-04A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 13	PIN 14		PIN 11	PIN 12
	GREEN	+	—	YELLOW	+	—

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

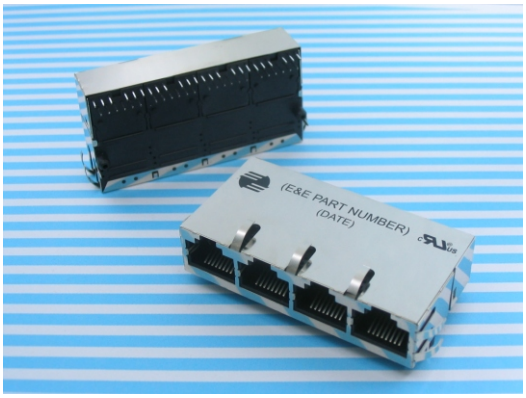
FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs fo Category 5 UTP cable with 1000Base-T full duplex applications
- Gang 1x4 design for Hub and Switch Applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR14U2GYA4-G109	1CT:1CT	TC	G / Y	MJ14U-06A	G109
MJR14U2GYA4-G11S	1CT:1CT	TC	G / Y	MJ14U-06A	G11S
MJR14U2GYA4-G309	1CT:1	TCA	G / Y	MJ14U-06A	G309
MJR14U2GYA4-G31S	1CT:1	TCA	G / Y	MJ14U-06A	G31S
MJR14U2NNA4-G109	1CT:1CT	TC	—	MJ14U-05A	G109
MJR14U2NNA4-G11S	1CT:1CT	TC	—	MJ14U-05A	G11S
MJR14U2NNA4-G309	1CT:1	TCA	—	MJ14U-05A	G309
MJR14U2NNA4-G31S	1CT:1	TCA	—	MJ14U-05A	G31S

Notes:

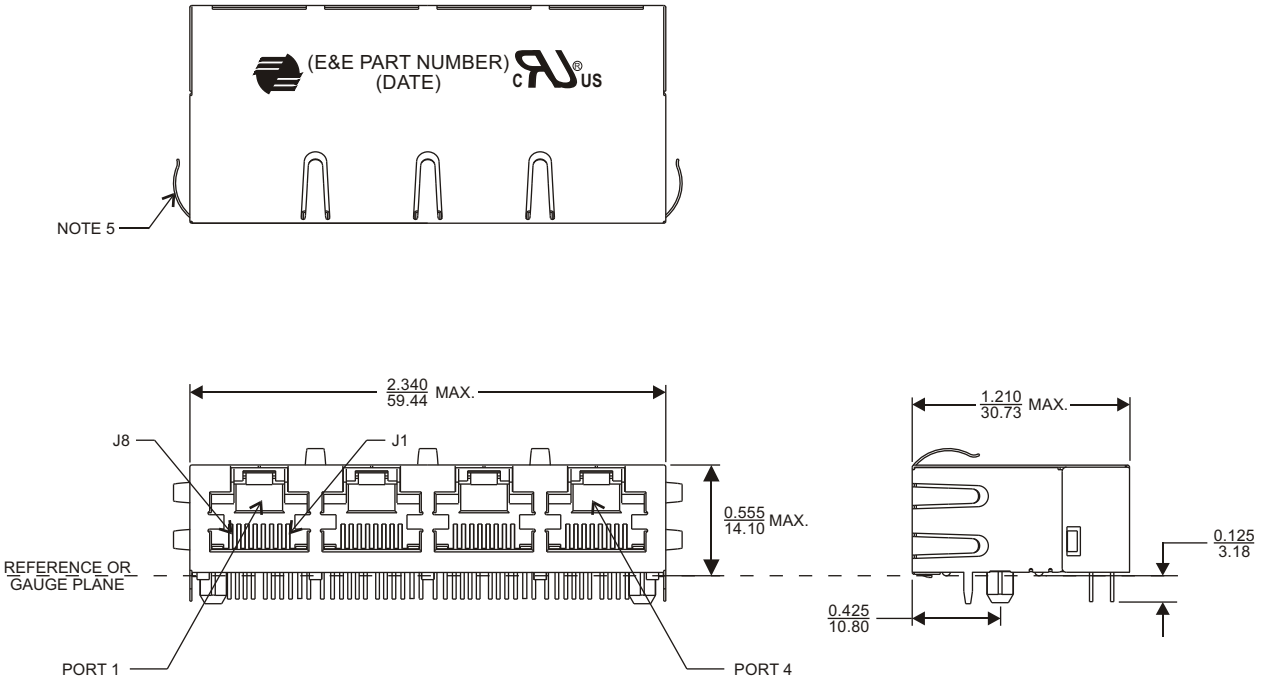
1. Ordering Information: MJR14U2GYA4-abbbc/MJR14U2NNA4-abbbc.
   - MJR14U2GYA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR14U2NNA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G109/G11S/G309/G31S).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; 'C" = Common-mode choke ; "A" = Auto-transformer
5. LEDs (Left / Right) : 'G" = Green ; "Y" = Yellow ; " – " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

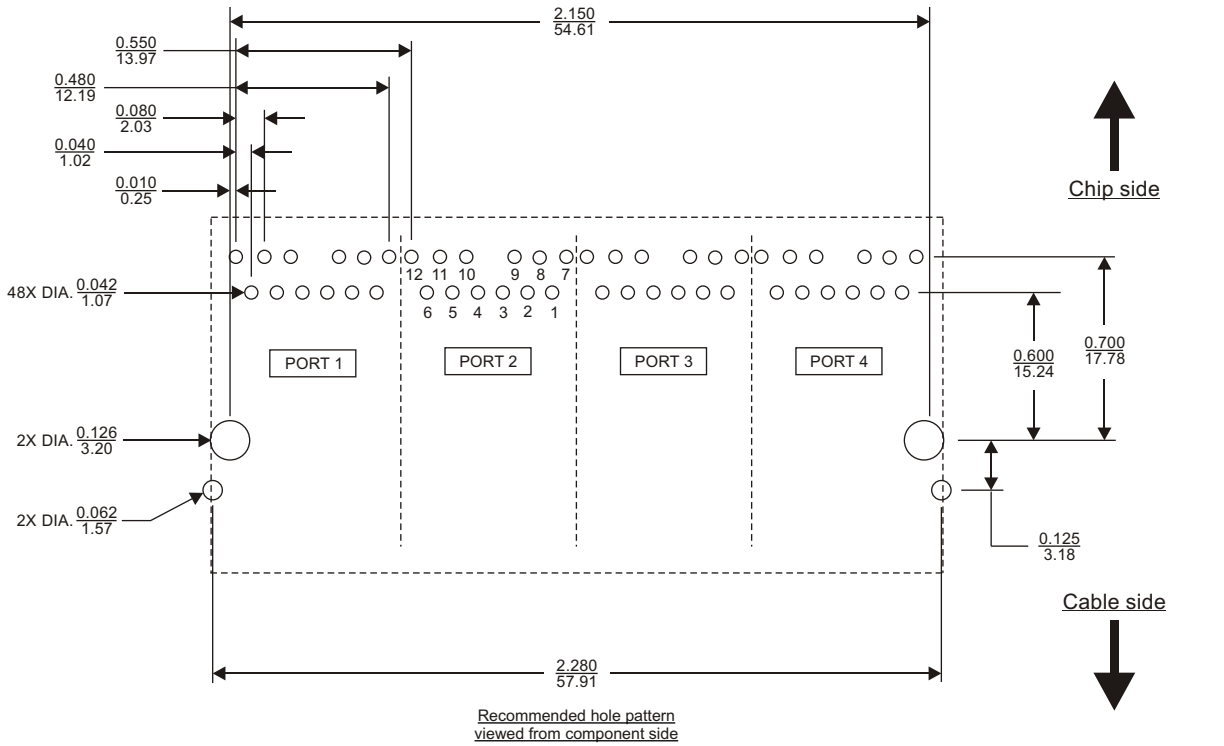
1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins

MECHANICAL DIMENSIONS

MJ14U-05A





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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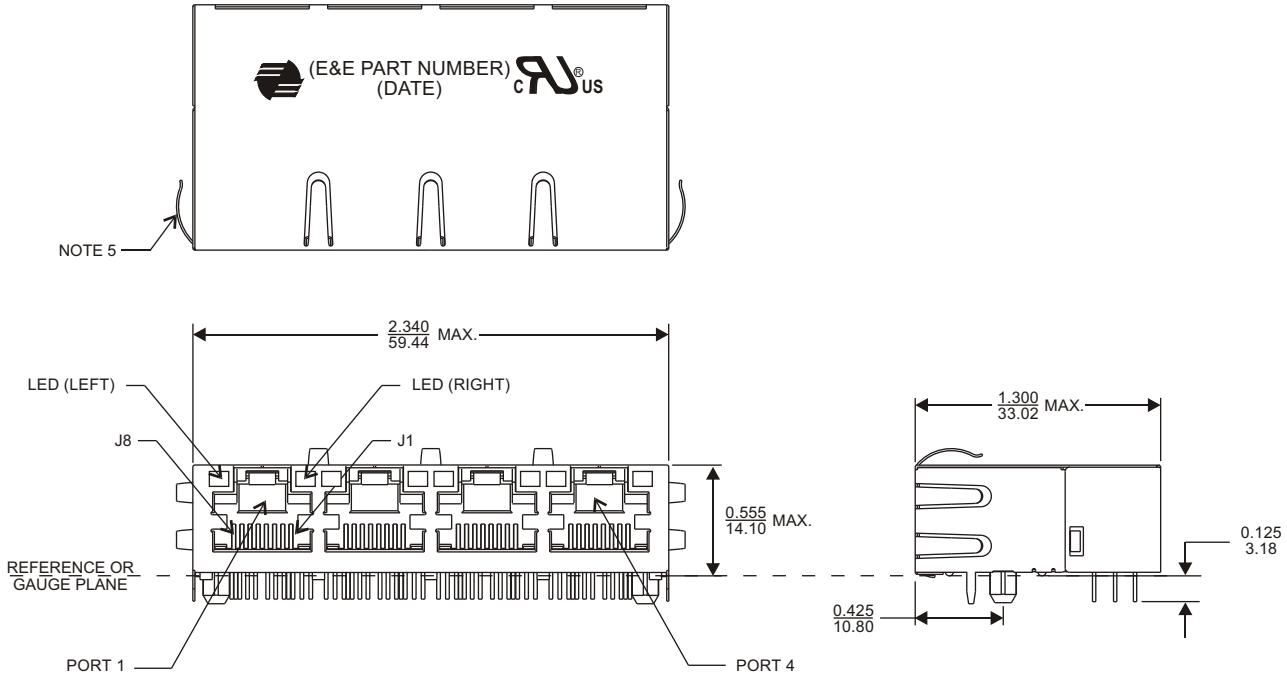
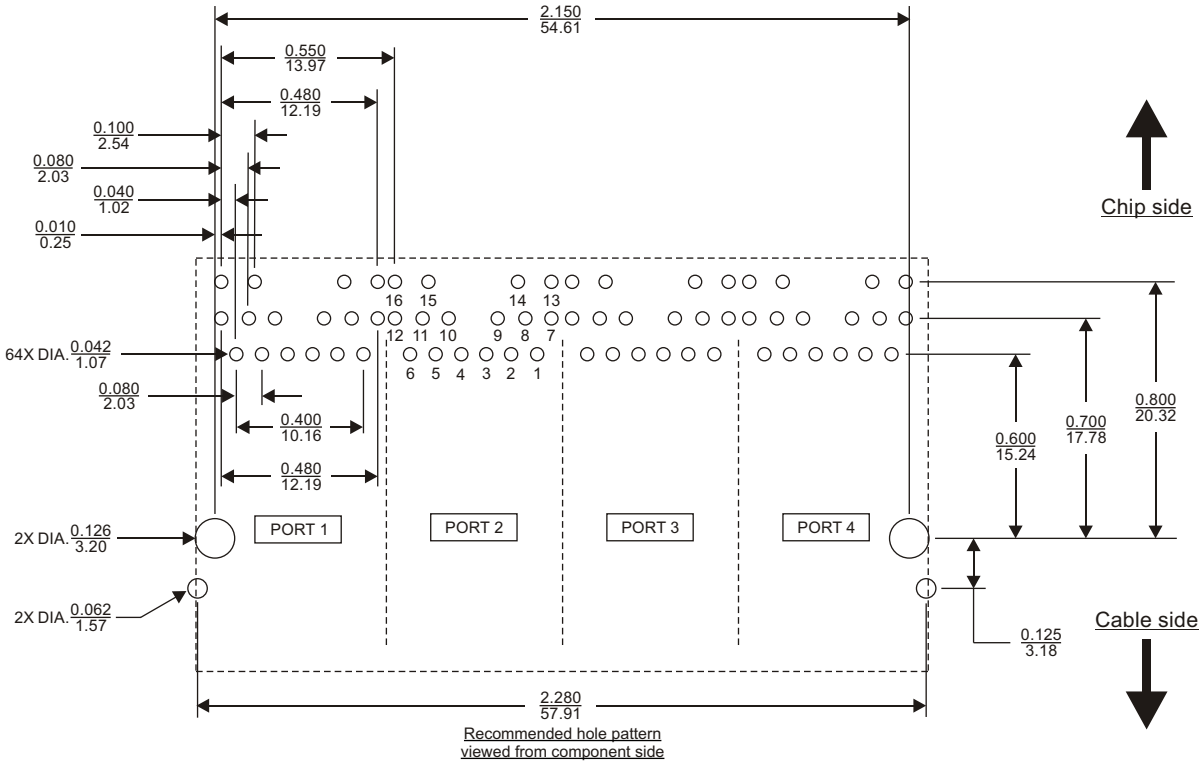
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins

MECHANICAL DIMENSIONS

MJ14U-06A





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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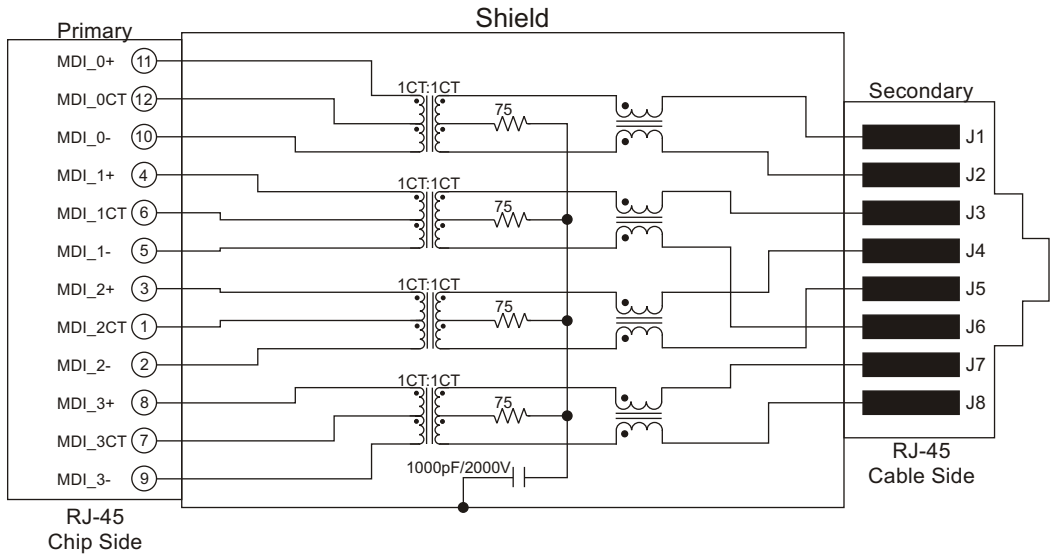
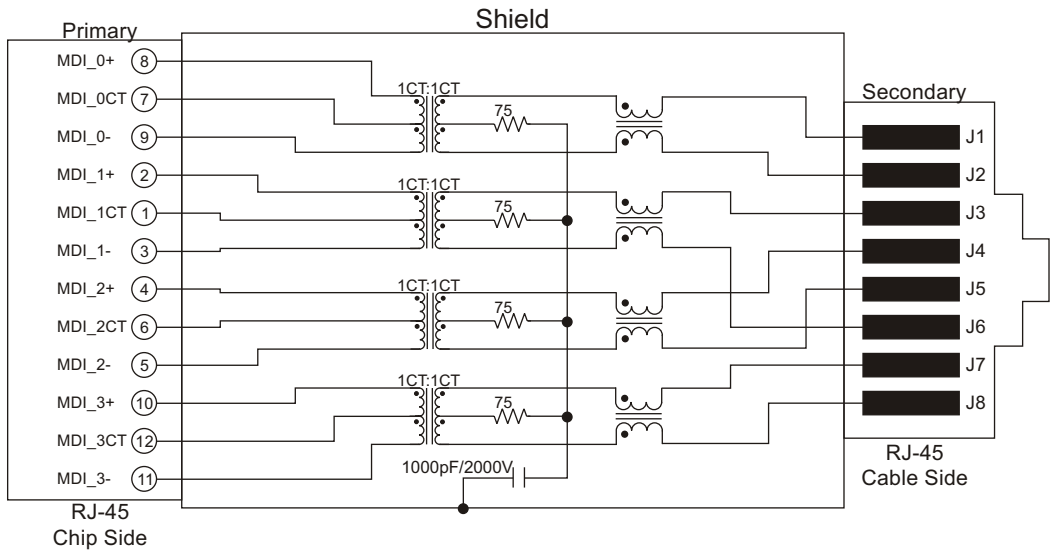
1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins

SCHEMATICS

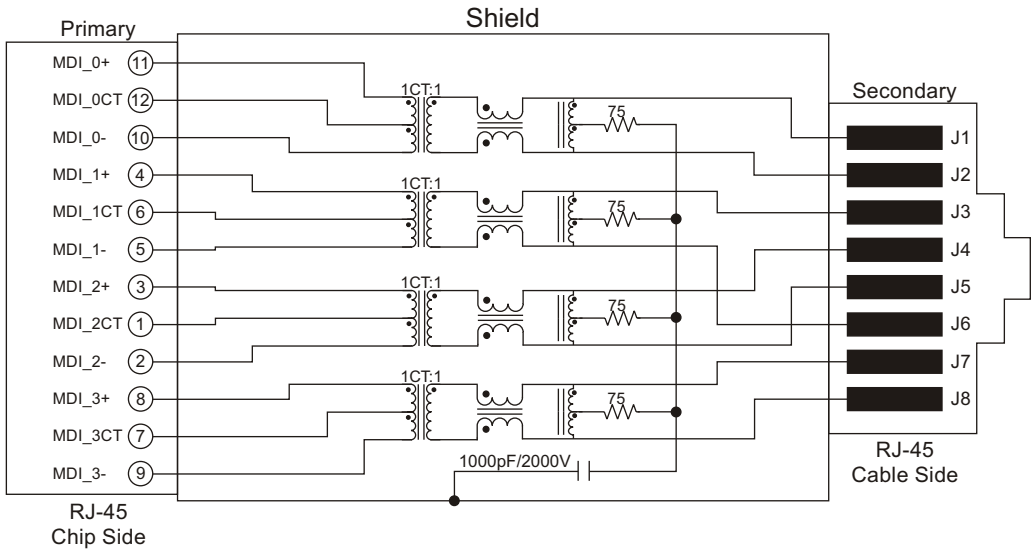
G109



G11S



G309



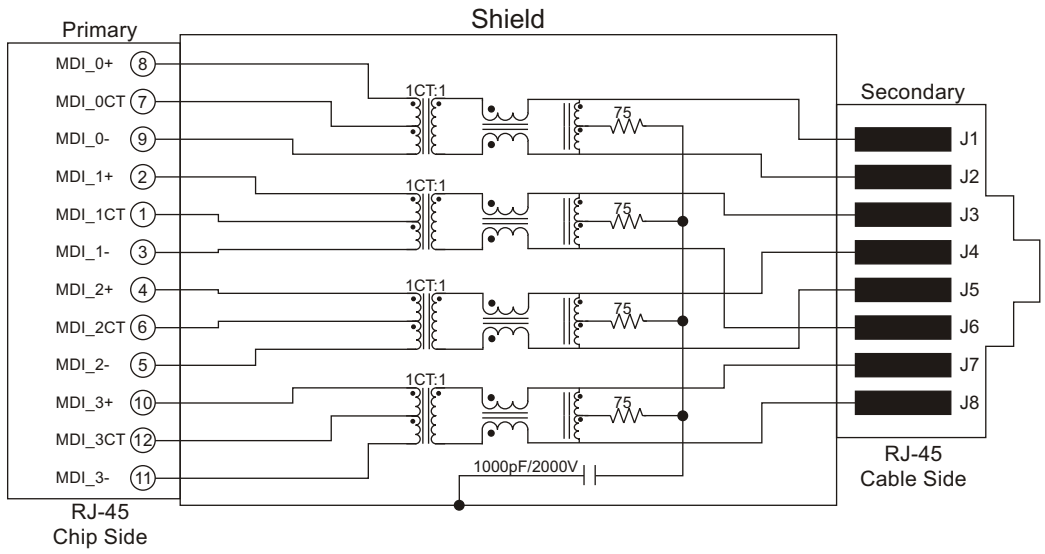
1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins

SCHEMATICS

G31S



LEDs COLOR AND POLARITY

MJ14U-06A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 16	PIN 15		PIN 14	PIN 13
LED (RIGHT) 13 14 LED (LEFT) 15 16	GREEN	+	—	YELLOW	+	—

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs fo Category 5 UTP cable with 1000Base-T full duplex applications
- Gang 1x4 design for Hub and Switch Applications
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR14D2GYA0-G101	1CT:1CT	TC	G / Y	MJ14D-03B	G101
MJR14D2GYA0-G114	1CT:1CT	TC	G / Y	MJ14D-03B	G114
MJR14D2GYA1-G101	1CT:1CT	TC	G / Y	MJ14D-03A	G101
MJR14D2GYA1-G114	1CT:1CT	TC	G / Y	MJ14D-03A	G114
MJR14D2NNA0-G101	1CT:1CT	TC	—	MJ14D-03C	G101
MJR14D2NNA0-G114	1CT:1CT	TC	—	MJ14D-03C	G114

Notes:

1. Ordering Information: MJR14D2GYA0-abbbc/MJR14D2GYA1-abbbc/MJR14D2NNA0-abbbc.
   - MJR14D2GYA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR14D2GYA1 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR14D2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G101/G114).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke .
5. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; " – " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins [7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

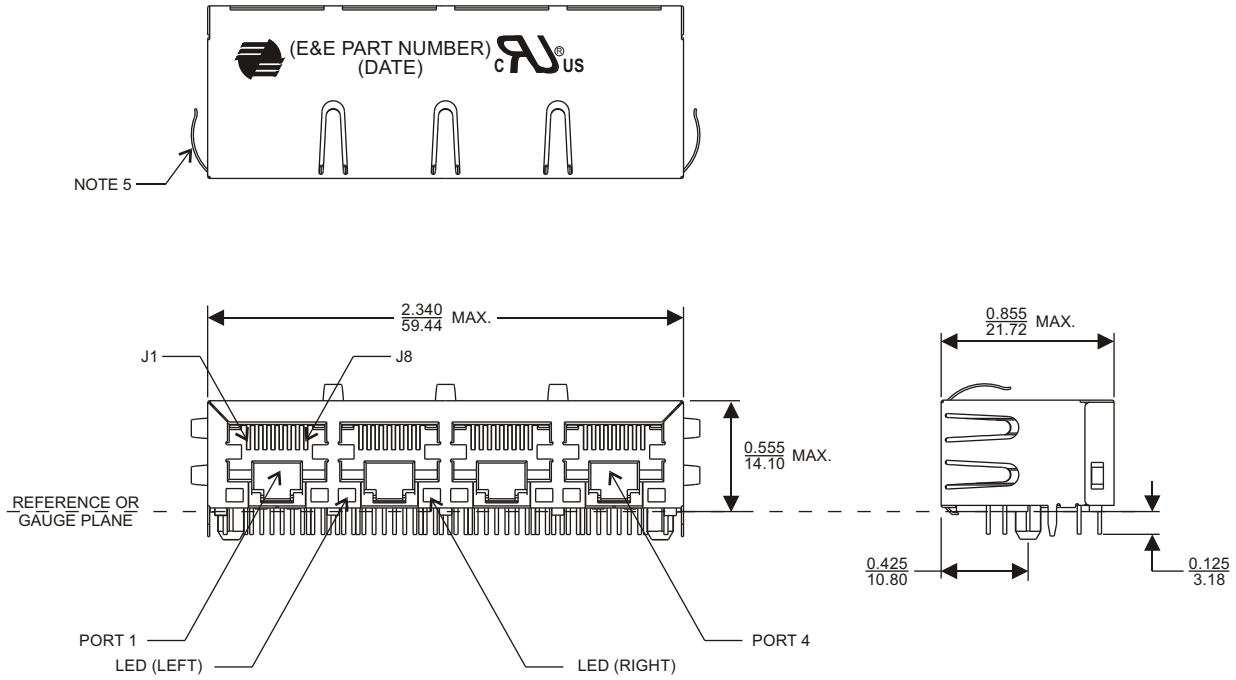
1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

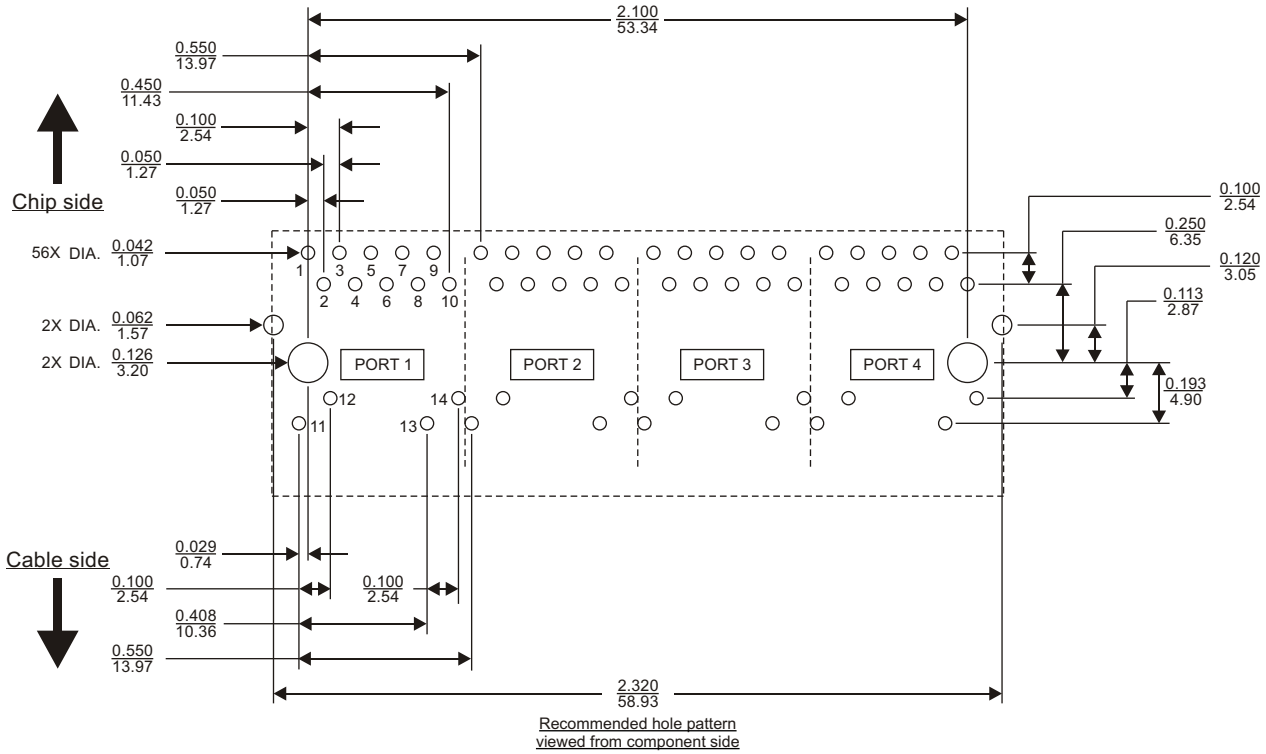
Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14D-03A





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

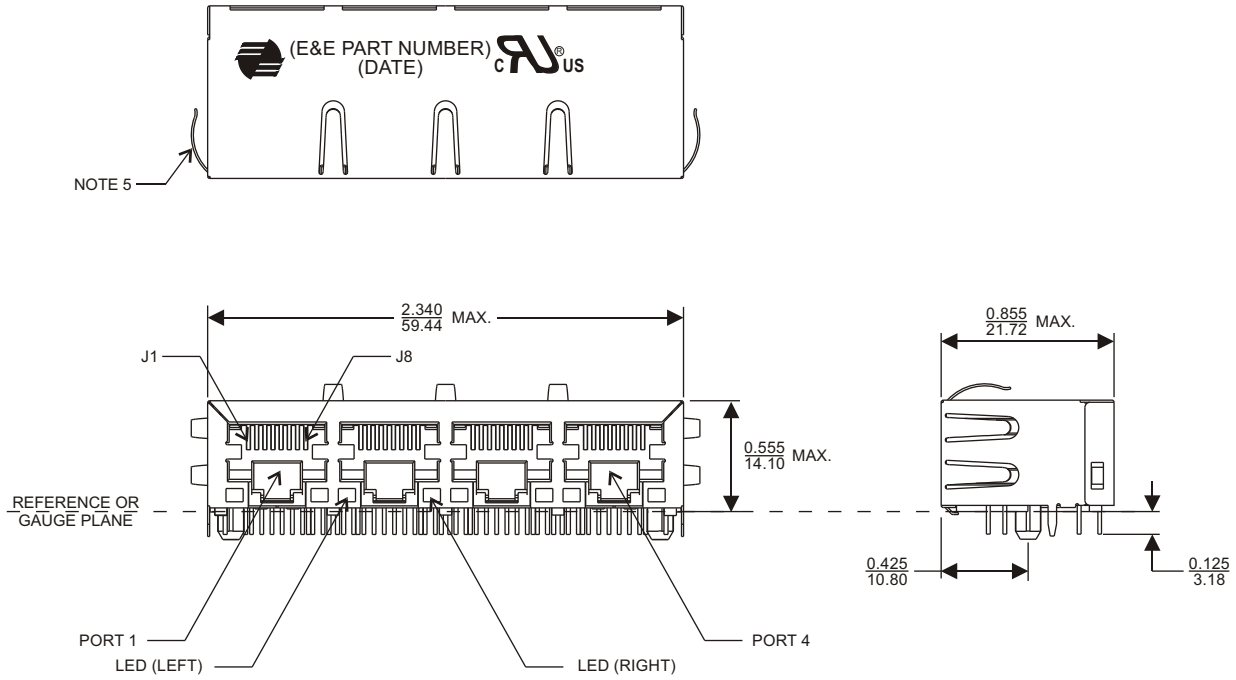
1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

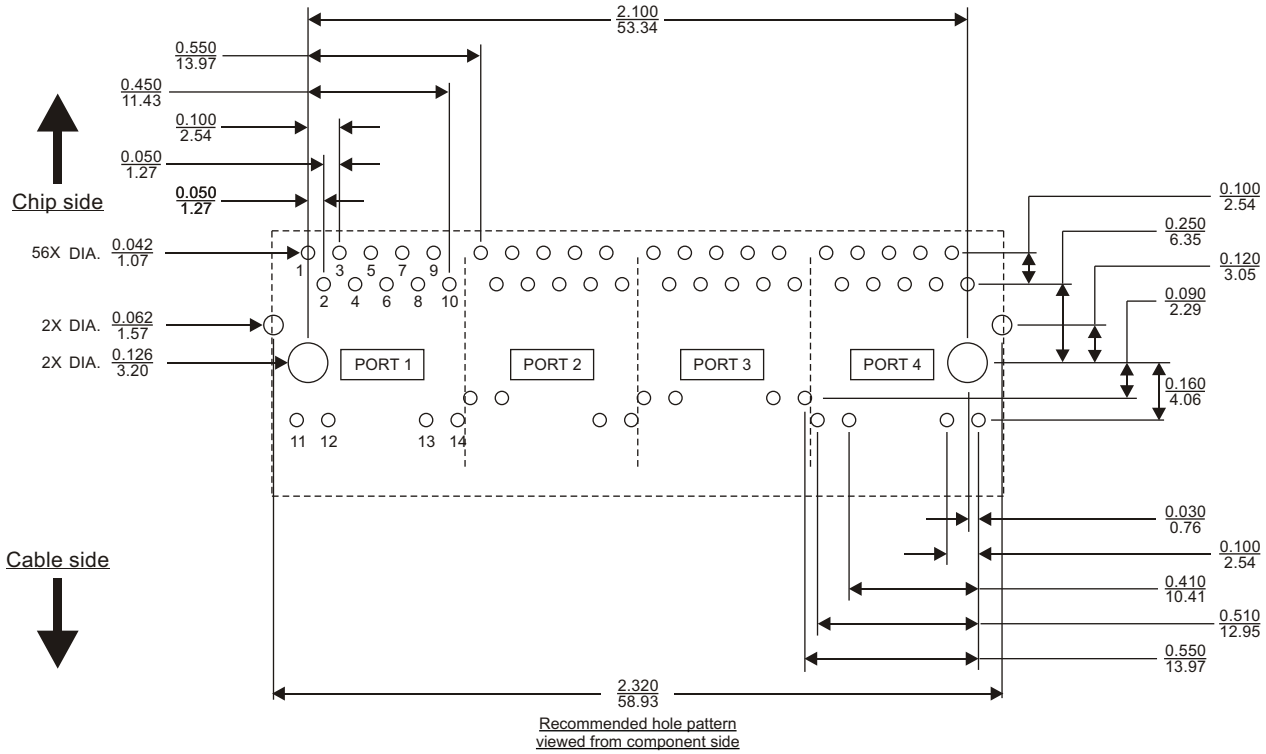
Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14D-03B





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

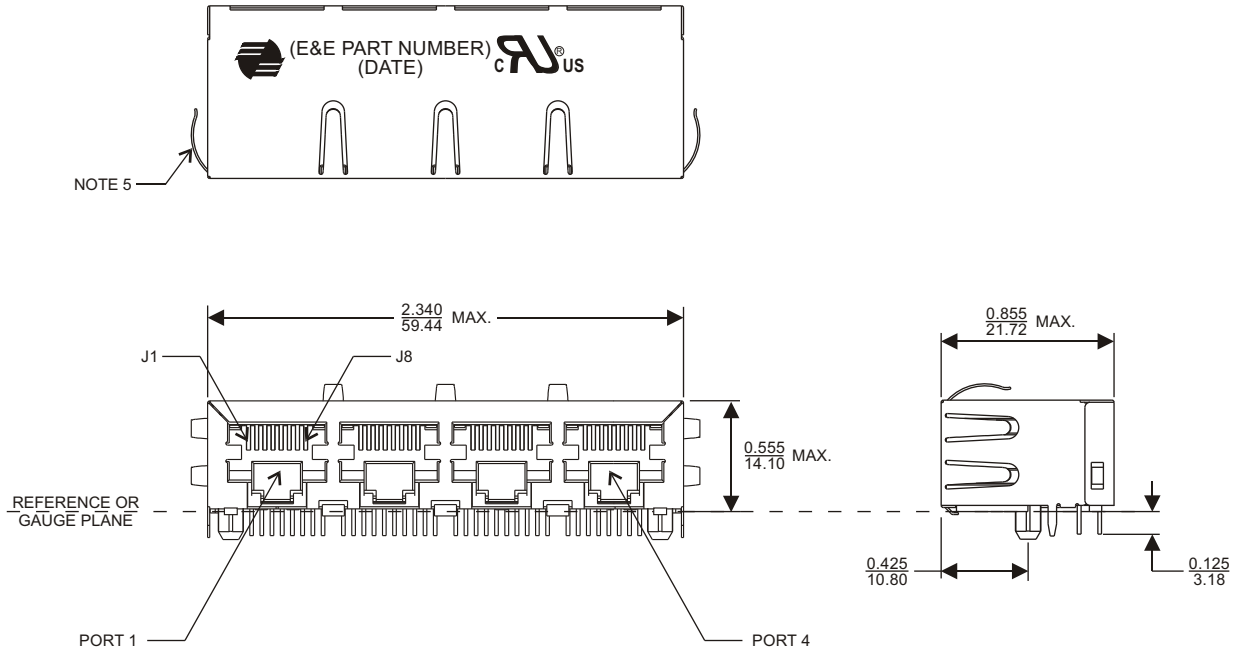
Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

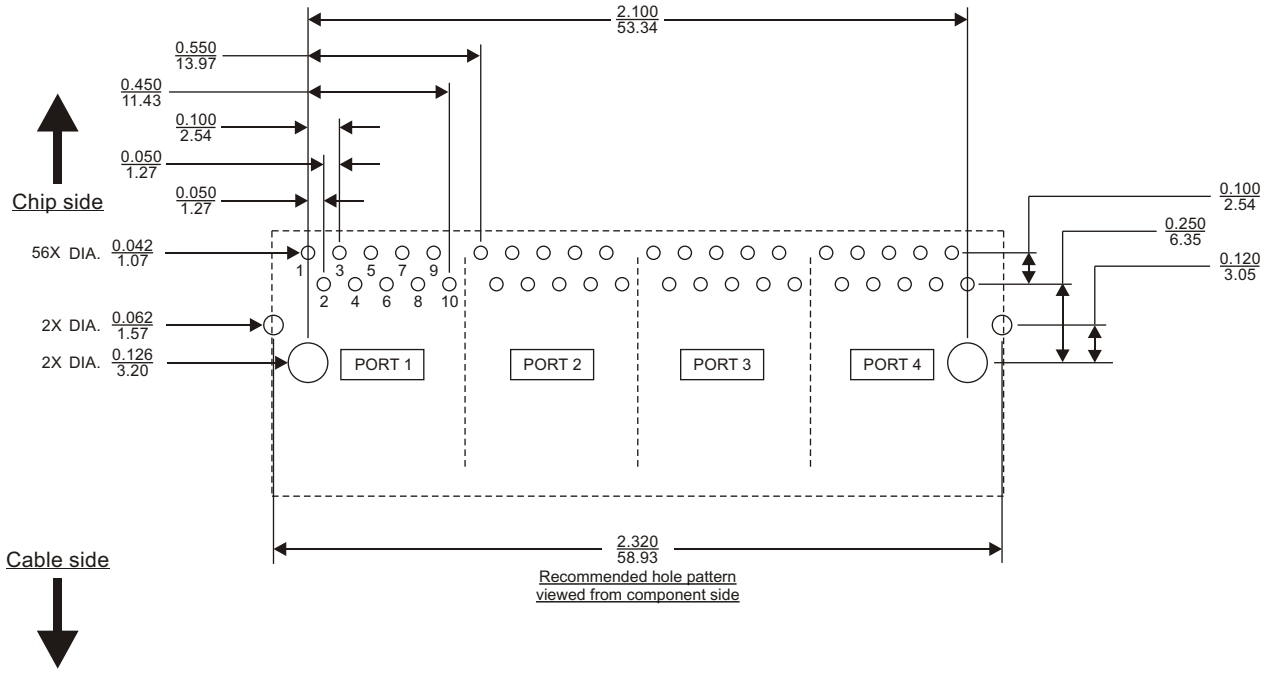
1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14D-03C





All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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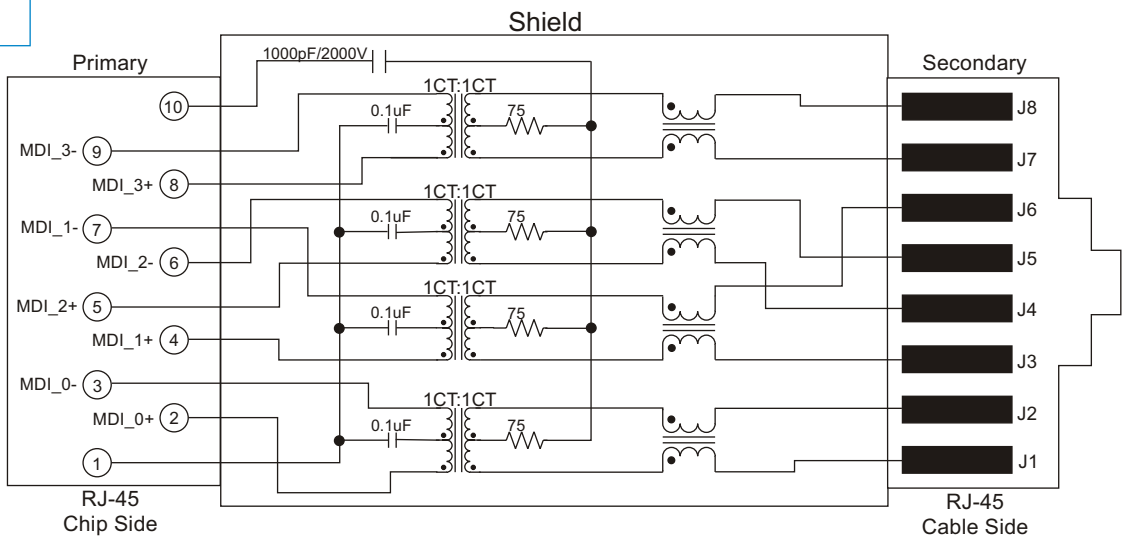
E & E Magnetic Products Limited

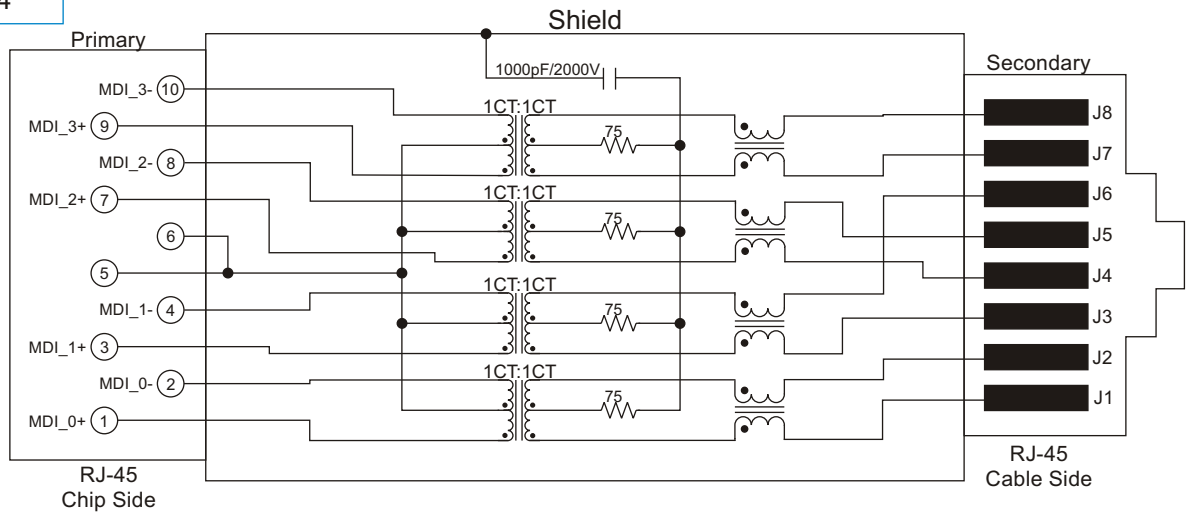
1000 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

SCHEMATICS

G101



G114



LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

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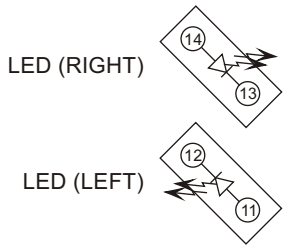
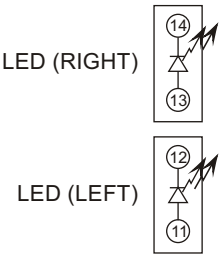
E & E Magnetic Products Limited

1000 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

LEDs Color And Polarity

MJ14D-03A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 14	PIN 13
	GREEN	+	—	YELLOW	+	—

LEDs Color And Polarity

MJ14D-03B	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 13	PIN 14
	GREEN	+	—	YELLOW	+	—

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
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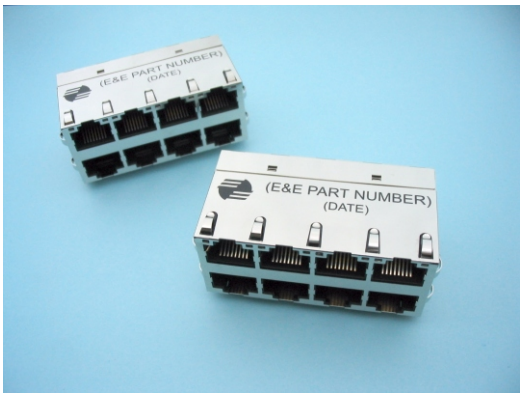
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern (With LED)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs of Category 5 UTP cable with 1000Base-T full duplex applications
- Operating temperature 0°C to +70°C
- Stacked design for Hub and Switch applications
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-100MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR24N2EEA0-G100	1CT:1CT	TC	E / E	MJ24N-06A	G100
MJR24N2EEA0-G300	1CT:1	TCA	E / E	MJ24N-06A	G300
MJR26N2EEA0-G100	1CT:1CT	TC	E / E	MJ26N-06A	G100
MJR26N2EEA0-G300	1CT:1	TCA	E / E	MJ26N-06A	G300
MJR28N2EEA0-G100	1CT:1CT	TC	E / E	MJ28N-06A	G100
MJR28N2EEA0-G300	1CT:1	TCA	E / E	MJ28N-06A	G300

Notes:

1. Ordering Information: MJR24N2EEA0-abbbc/MJR26N2EEA0-abbbc/MJR28N2EEA0-abbbc.
   - MJR24N2EEA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2EEA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2EEA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G100/G300).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
5. LEDs (Left / Right) : "E" = Orange & Green bi-color (3 terminals type). For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins [7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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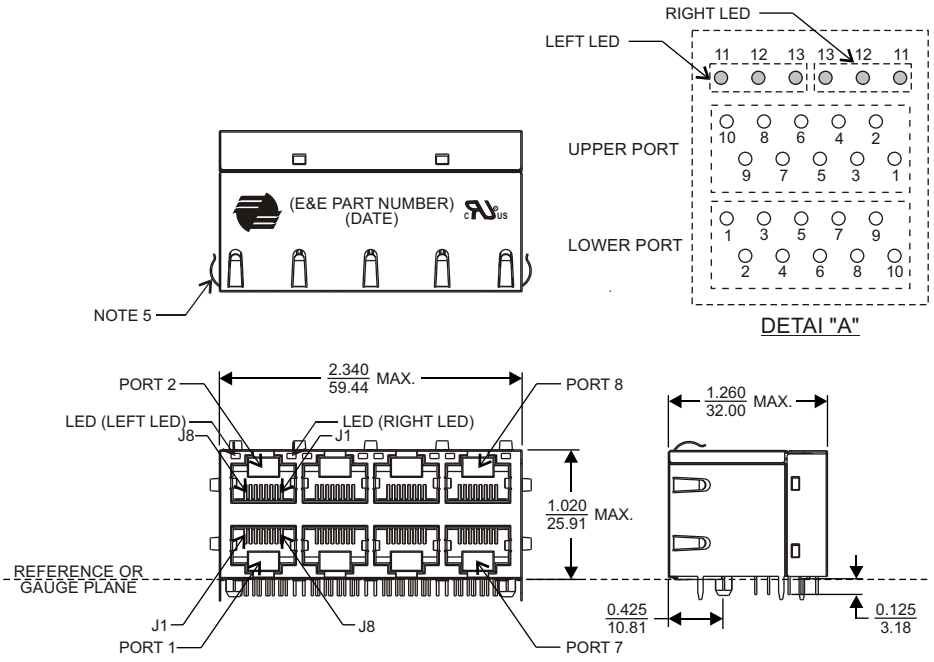
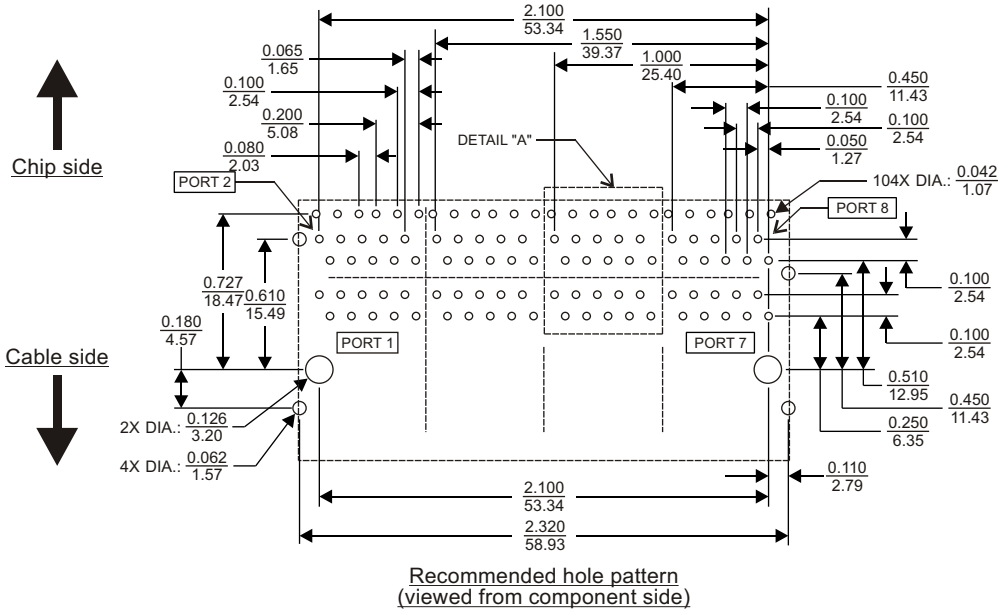
Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern (With LED)

MECHANICAL DIMENSIONS

MJ24N-06A





Recommended hole pattern
(viewed from component side)

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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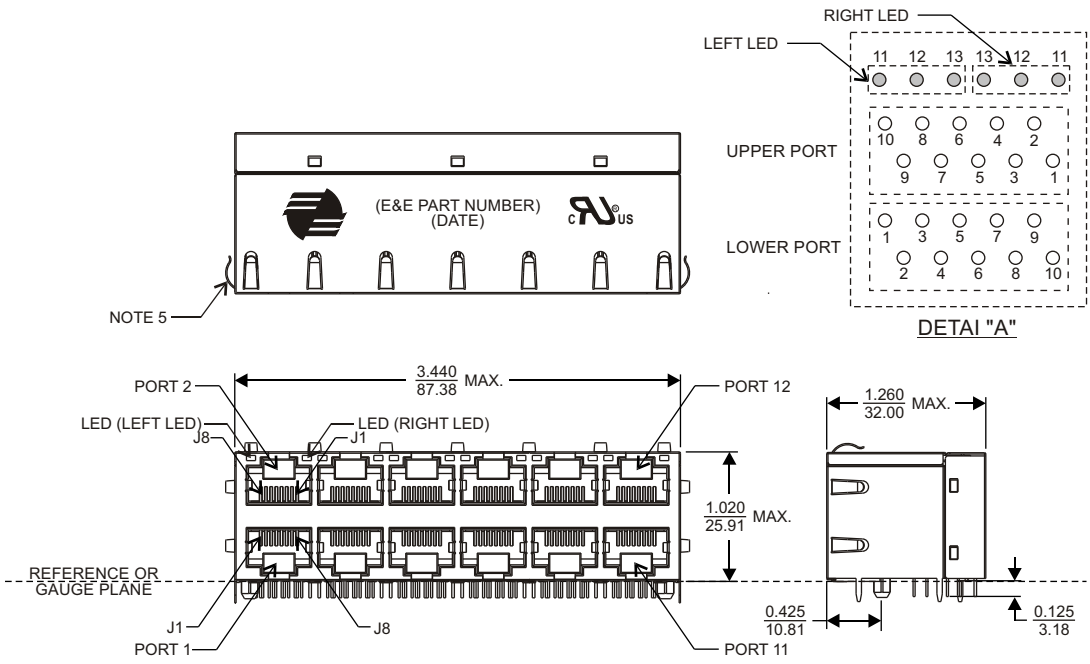
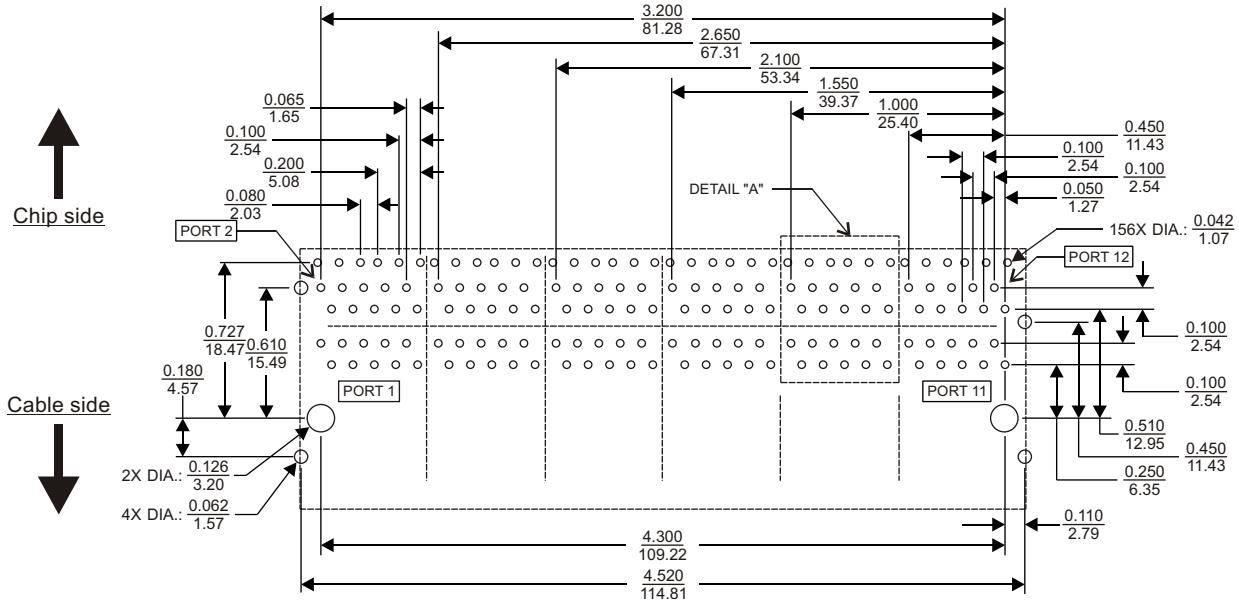
1000 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern (With LED)

MECHANICAL DIMENSIONS

MJ26N-06A





Recommended hole pattern
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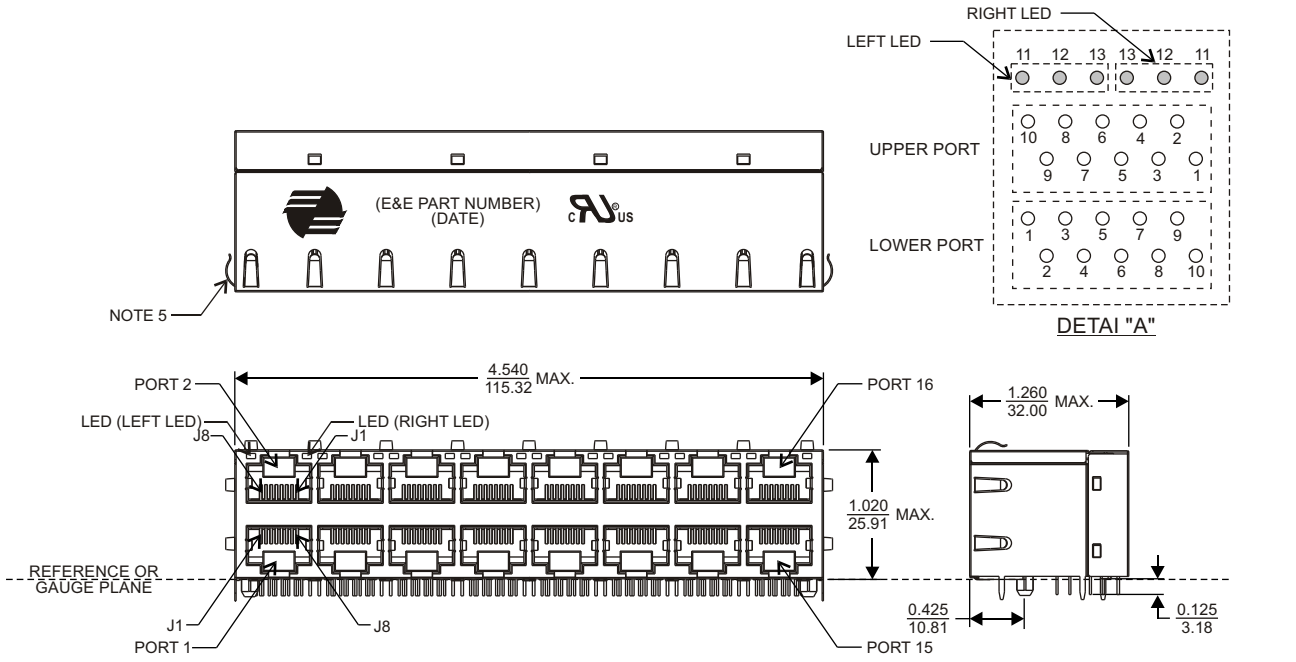
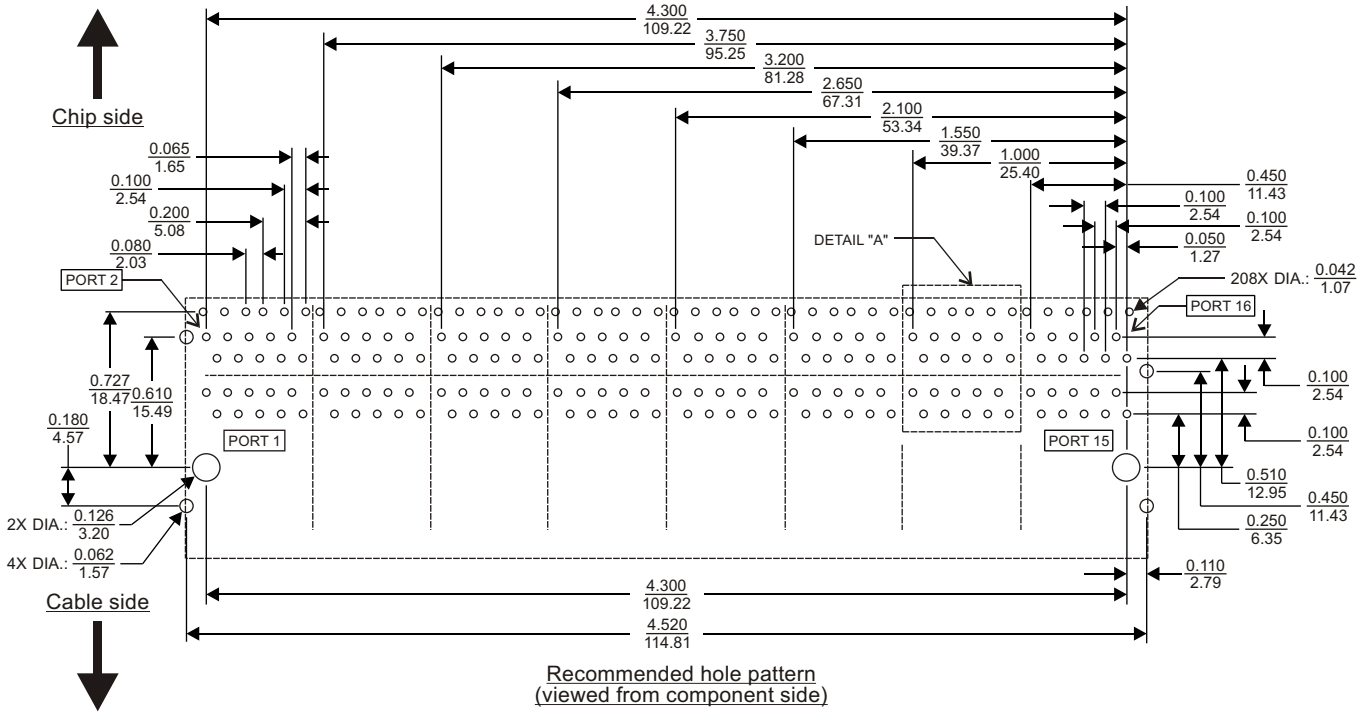
1000 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern (With LED)

MECHANICAL DIMENSIONS

MJ28N-06A





Recommended hole pattern
(viewed from component side)

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm\frac{0.010}{0.25}$.

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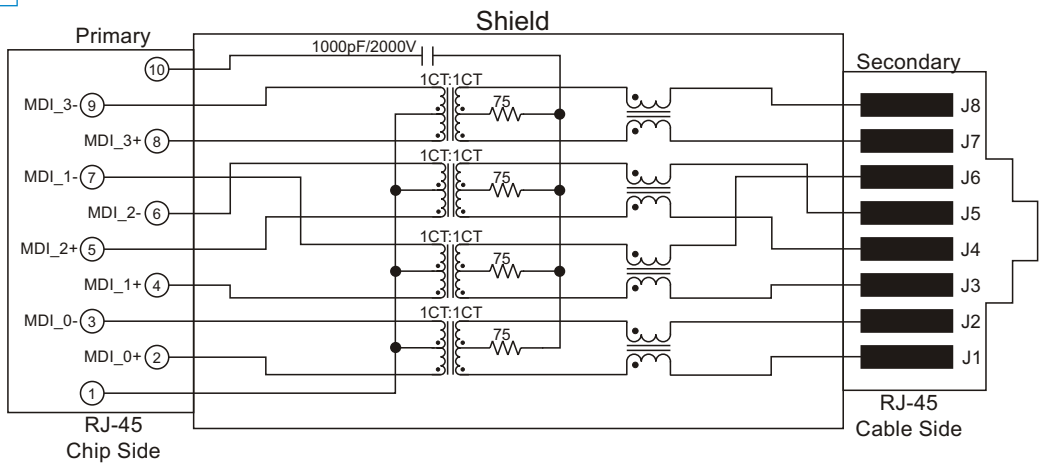
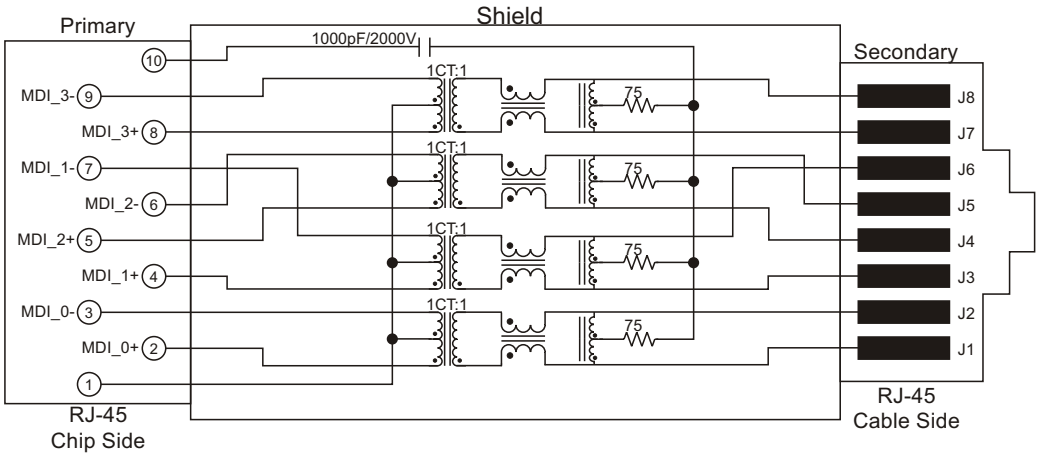
1000 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern (With LED)

SCHEMATICS (EACH PORT)

G100



G300



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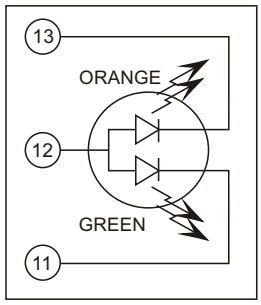
1000 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern (With LED)

LEDs Color And Polarity



COLOR	POLARITY		COLOR	POLARITY	
	PIN 12	PIN 11		PIN 12	PIN 13
GREEN	+	—	ORANGE	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Orange	607	2.05	2.5

FOR MORE INFORMATION, PLEASE CONTACT

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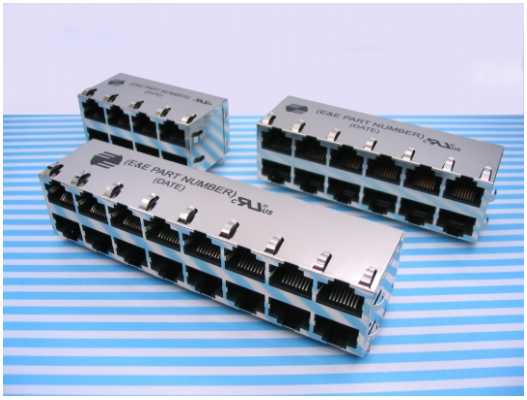
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications Stacked 2XN, Through Hole Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs of Category 5 UTP cable with 1000Base-T full duplex applications
- Operating temperature 0°C to +70°C
- Stacked design for Hub and Switch Applications
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	Platform	Mechanical Package	Schematic
MJR24N2NNA0-G100	1CT:1CT	TC	2x4	MJ24N-02A	G100
MJR24N2NNA0-G300	1CT:1	TCA	2x4	MJ24N-02A	G300
MJR26N2NNA0-G100	1CT:1CT	TC	2x6	MJ26N-02A	G100
MJR26N2NNA0-G300	1CT:1	TCA	2x6	MJ26N-02A	G300
MJR28N2NNA0-G100	1CT:1CT	TC	2x8	MJ28N-02A	G100
MJR28N2NNA0-G300	1CT:1	TCA	2x8	MJ28N-02A	G300

Notes:

1. Ordering Information: MJR24N2NNA0-abbbc/MJR26N2NNA0-abbbc/MJR28N2NNA0-abbbc.
   - MJR24N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G100/G300).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

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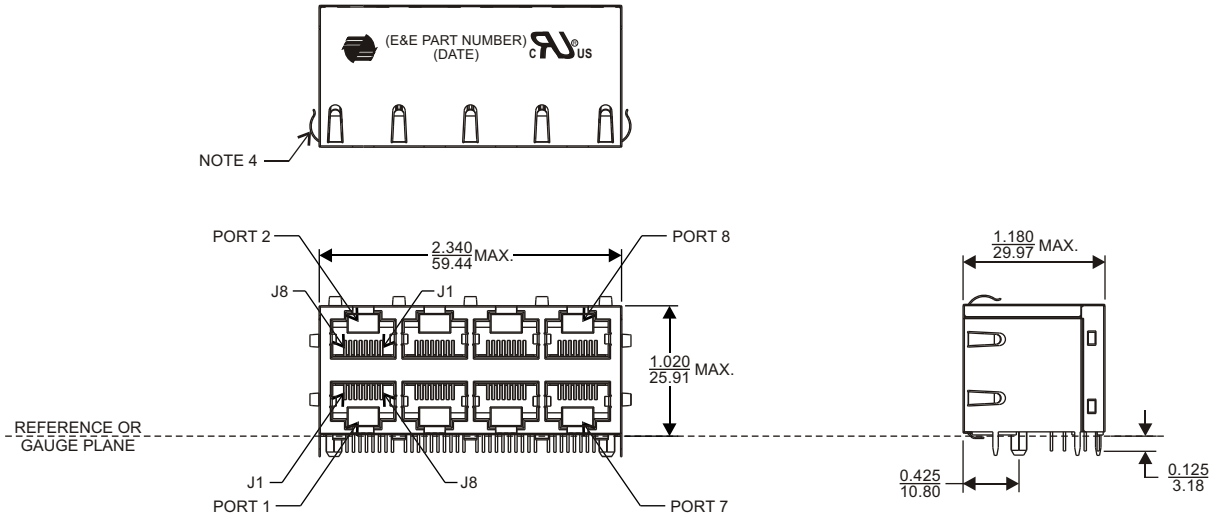
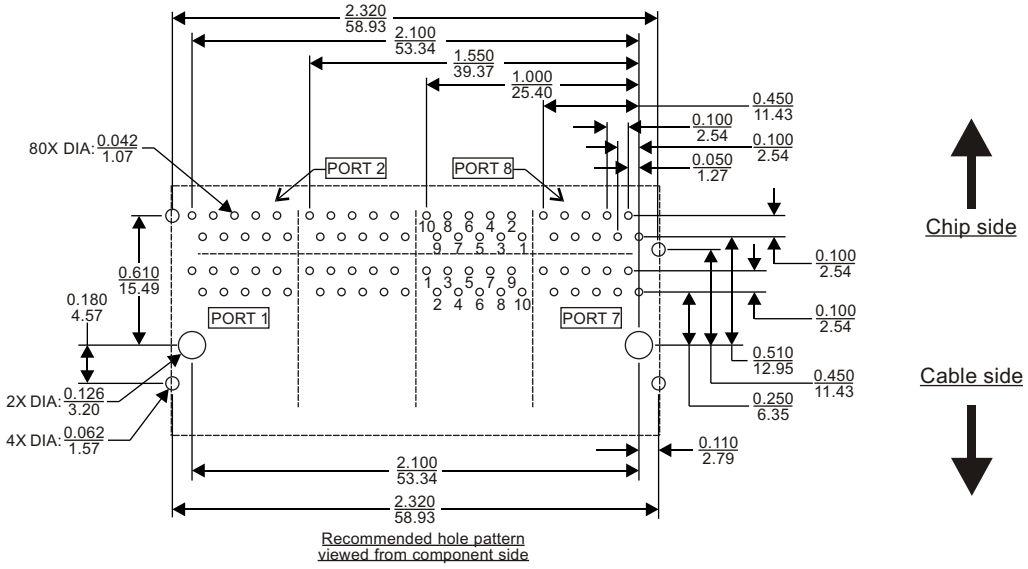
1000 Base-T Applications
Stacked 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ24N-02A





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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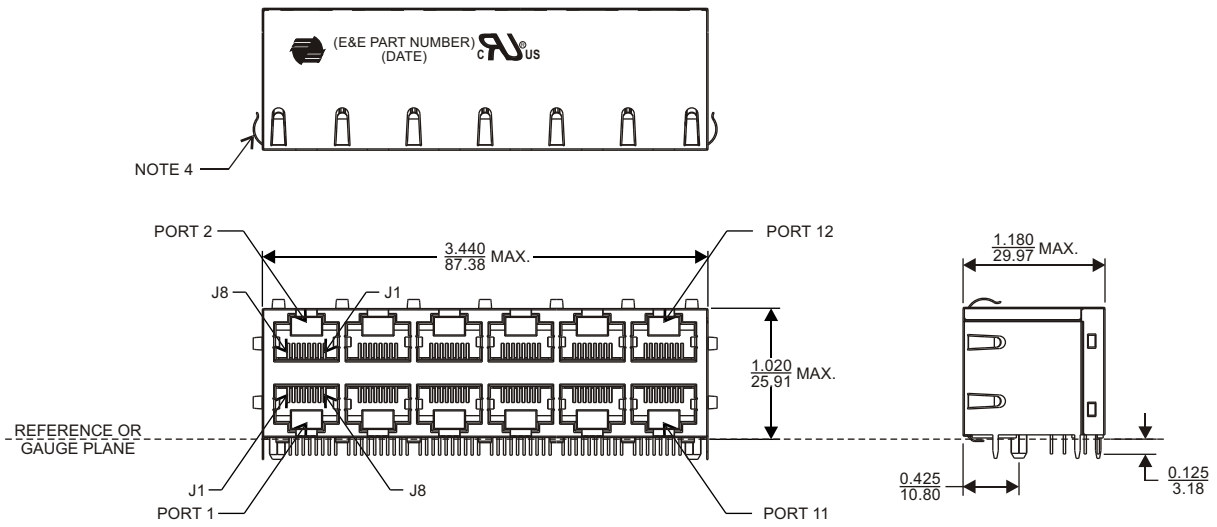
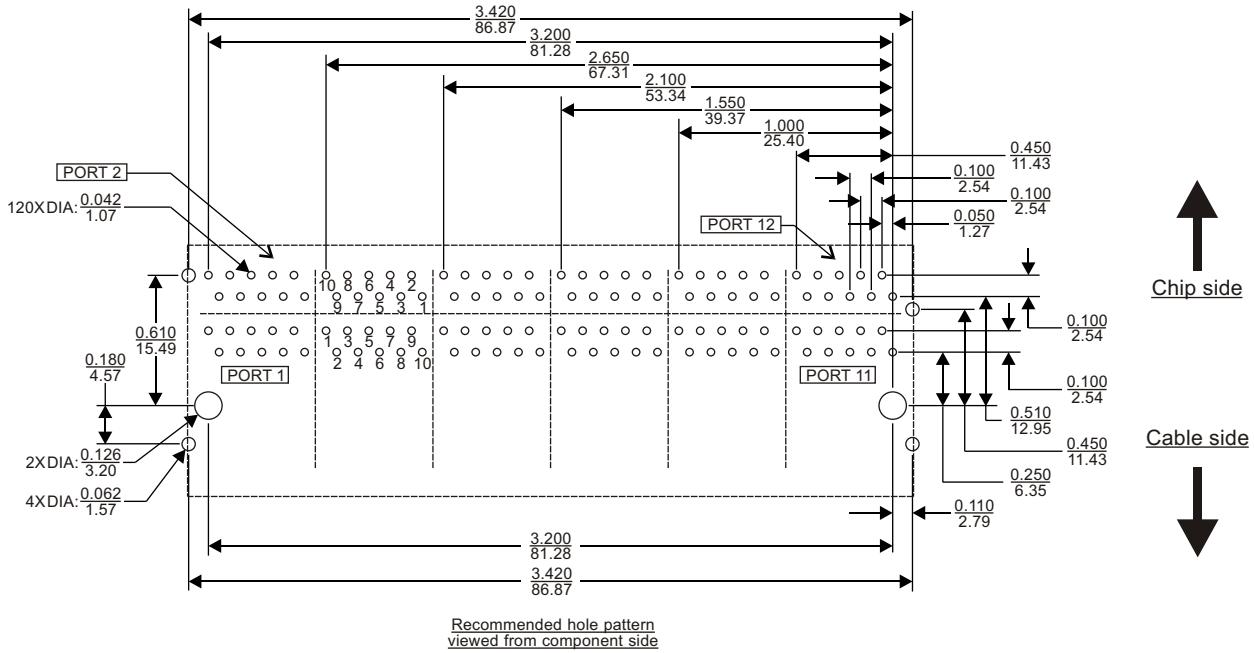
1000 Base-T Applications
Stacked 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ26N-02A





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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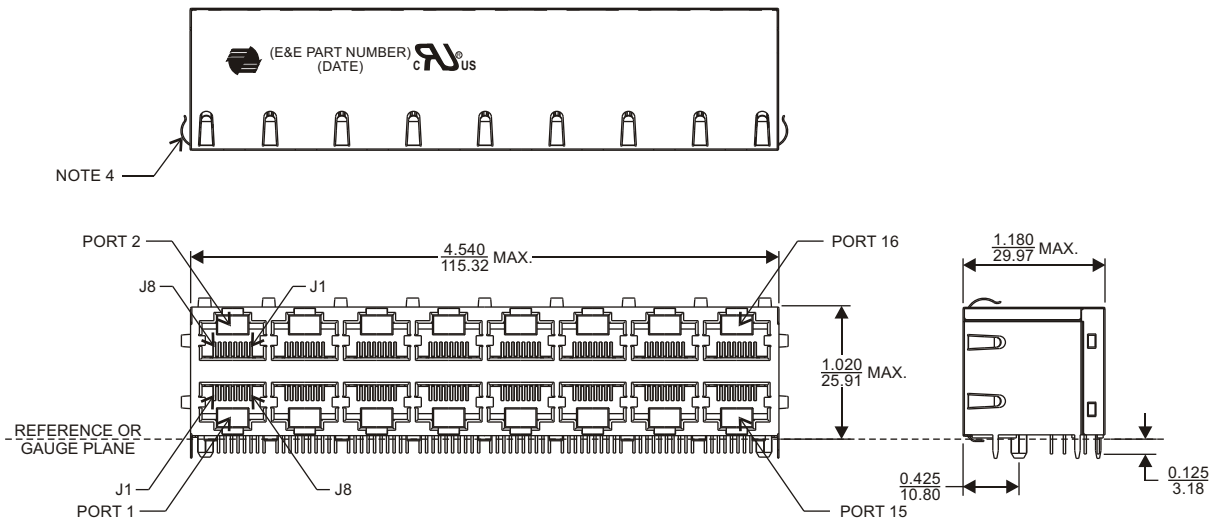
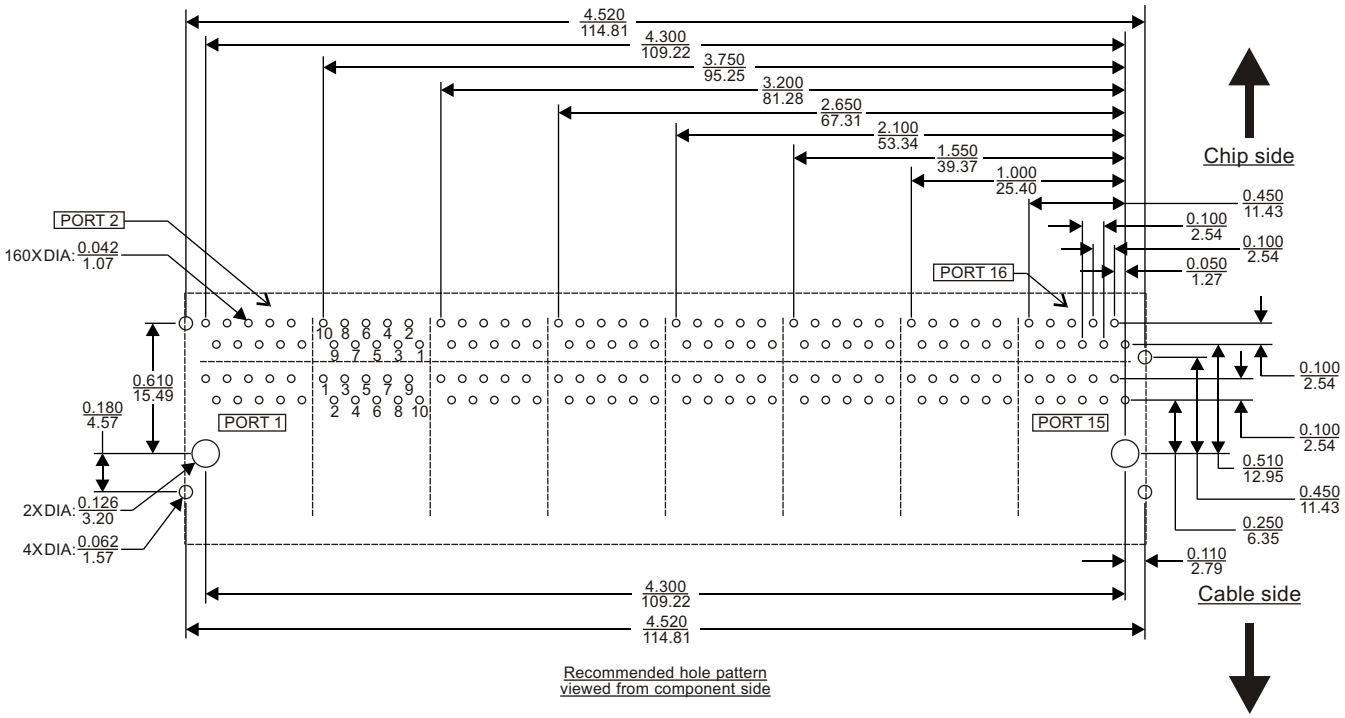
E & E Magnetic Products Limited

1000 Base-T Applications
Stacked 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ28N-02A





Recommended hole pattern
viewed from component side

All dimensions are specified in inch / mm with higher precedence in inch.

Unless otherwise specified, all tolerances are ± 0.010 / 0.25 .

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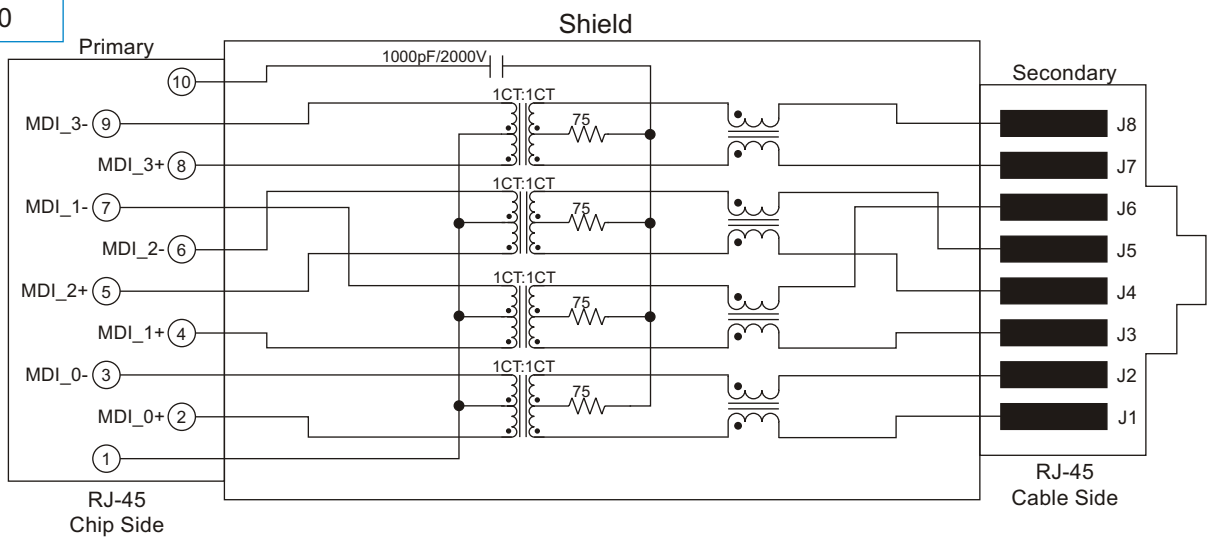
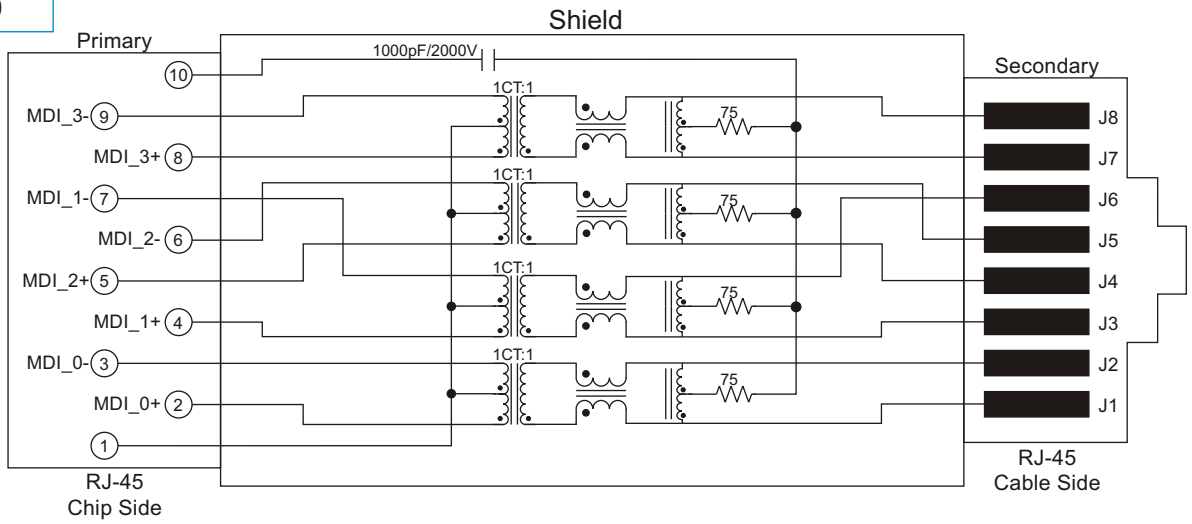
1000 Base-T Applications
Stacked 2XN, Through Hole
Zigzag Output Pins Pattern

SCHEMATICS(EACH PORT)

G100



G300



MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[5]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
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Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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Elec & Eltek依利安達
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1000 Base-T Applications
Stacked 2X1, Through Hole
Vertical-row of Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 2000VDC isolation voltage
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs fo Category 5 UTP cable with 1000Base-T full duplex applications
- Operating temperature 0°C to +70°C
- Stacked 2x1 design for Hub and Switch Applications
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (VDC)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	2000

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	LED [5] (Left / Right)	Mechanical Package	Schematic
MJR21N2EEA2-G308	1CT:1	TCA	E / E	MJ21N-01A	G308

Notes:

1. Ordering Information: MJR21N2EEA2-abbbc.
   - MJR21N2EEA2 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G308).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
5. LEDs (Left / Right) : "E" = Orange & Green bi-color (3 terminals type). For different LED color requirements, please contact E&E Magnetic Products Limited.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins [7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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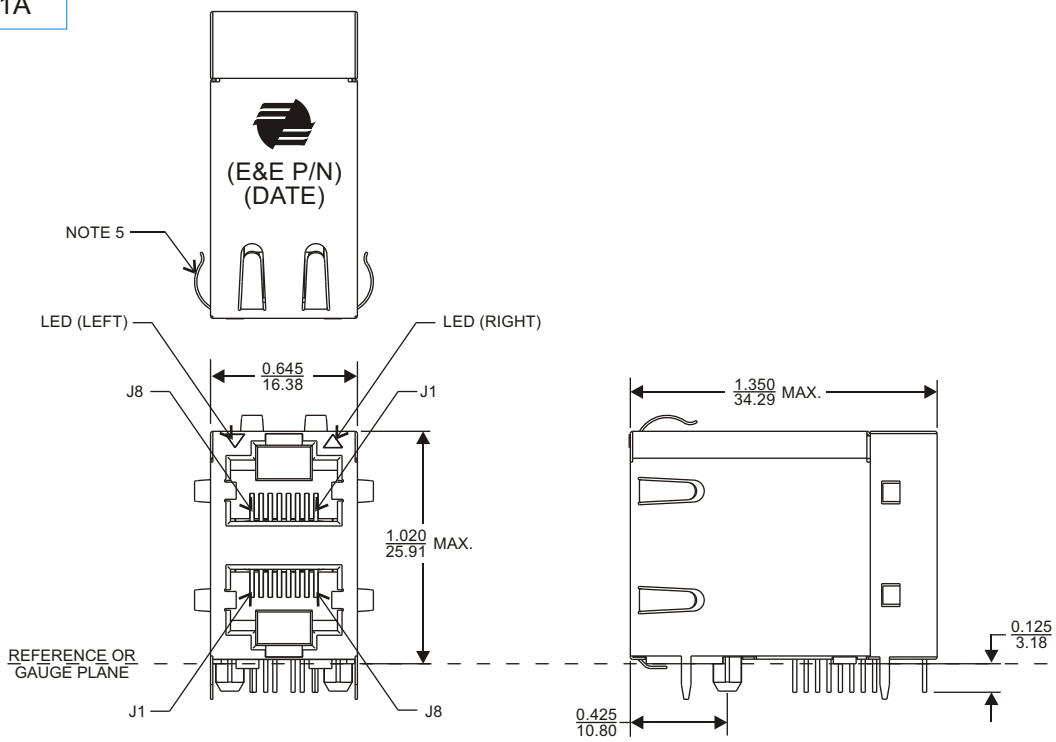
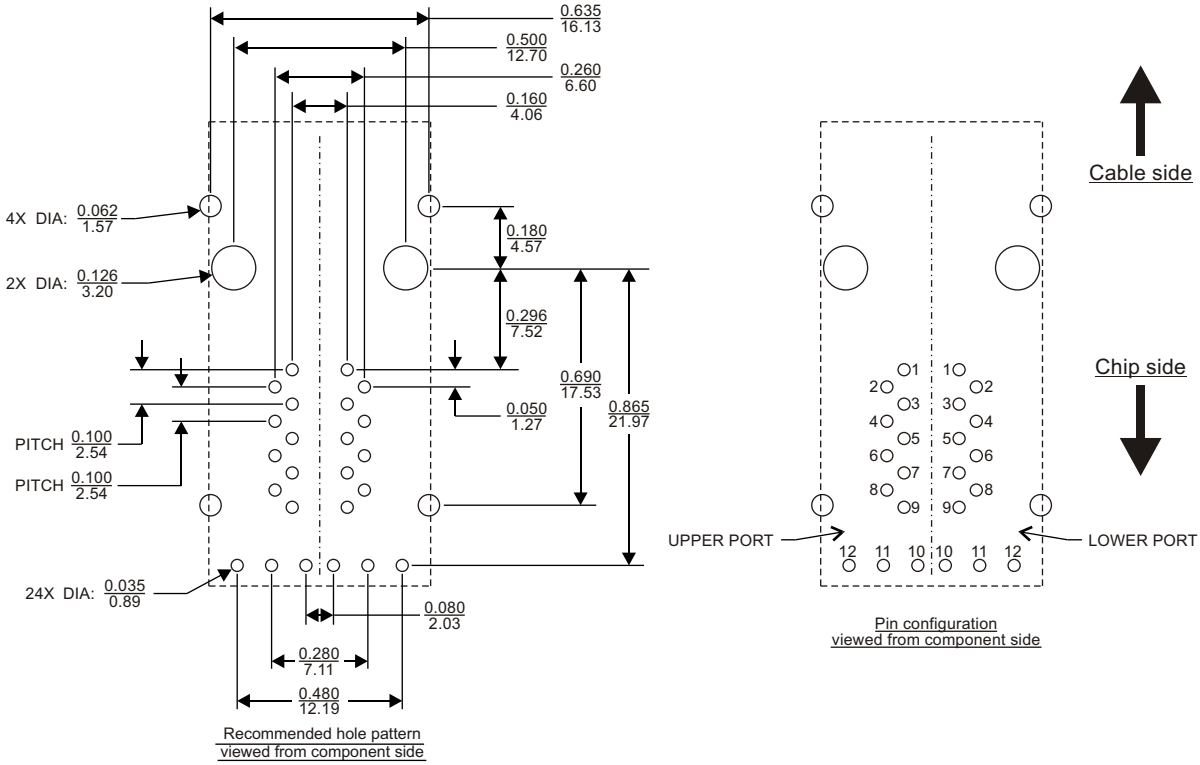
1000 Base-T Applications
Stacked 2X1, Through Hole
Vertical-row of Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ21N-01A





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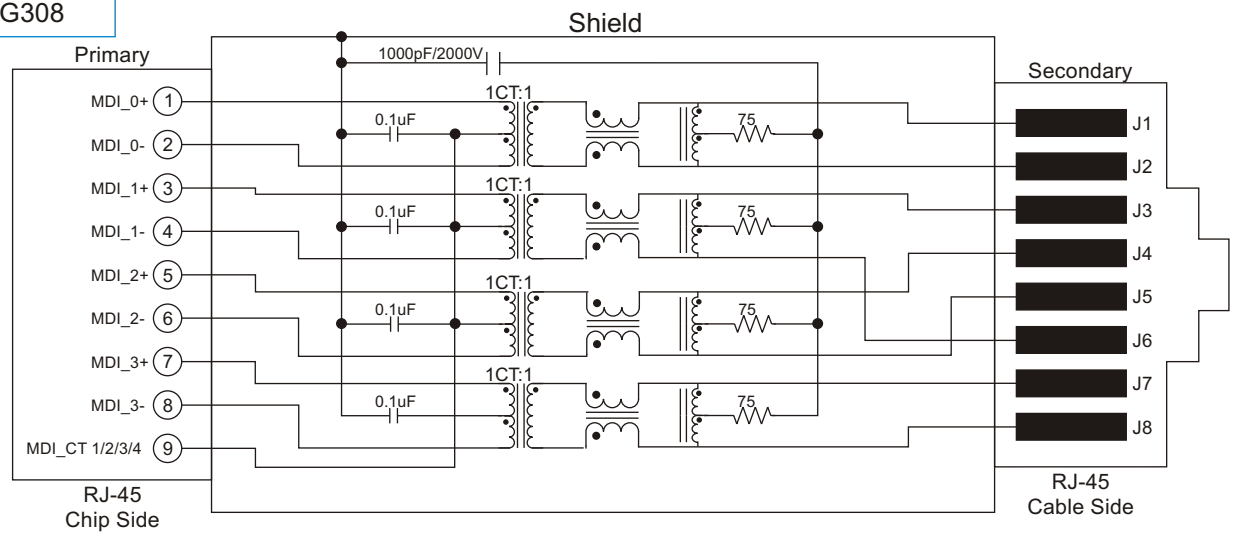
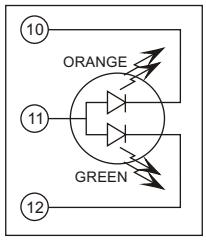
1000 Base-T Applications
Stacked 2X1, Through Hole
Vertical-row of Zigzag Output Pins Pattern

SCHEMATICS

G308



LEDs COLOR AND POLARITY



COLOR	POLARITY		COLOR	POLARITY	
	PIN 11	PIN 12		PIN 11	PIN 10
GREEN	+	—	ORANGE	+	—

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Orange	607	2.05	2.5

FOR MORE INFORMATION, PLEASE CONTACT

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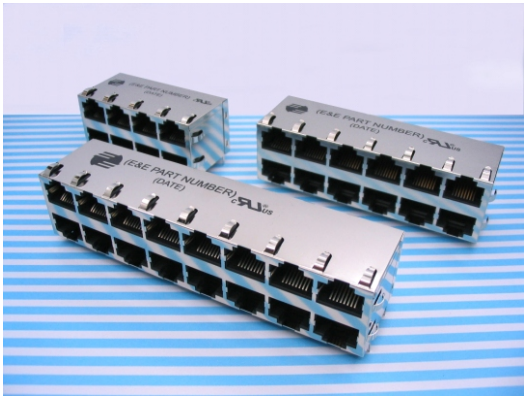
1000 Base-T Applications
Stacked 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support 4 pairs of Category 5 UTP cable with 1000Base-T full duplex applications
- Operating temperature 0°C to +70°C
- Stacked design for Hub and Switch Applications
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)		Return Loss [2] (dB Min)		CMRR (dB Min)	Crosstalk [2] (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	32.0	33-20Log(F/50)	1500

Part Number Table

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	Platform	Mechanical Package	Schematic
MJR24N2NNA20G115	1CT:1CT	CT	2x4	MJ24N-03A+0	G115
MJR26N2NNA20G115	1CT:1CT	CT	2x6	MJ26N-03A+0	G115
MJR28N2NNA20G115	1CT:1CT	CT	2x8	MJ28N-03A+0	G115

Notes:

1. Ordering Information: MJR24N2NNA20abbbc/MJR26N2NNA20abbbc/MJR28N2NNA20abbbc.
   - MJR24N2NNA20 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2NNA20 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2NNA20 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(G115).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

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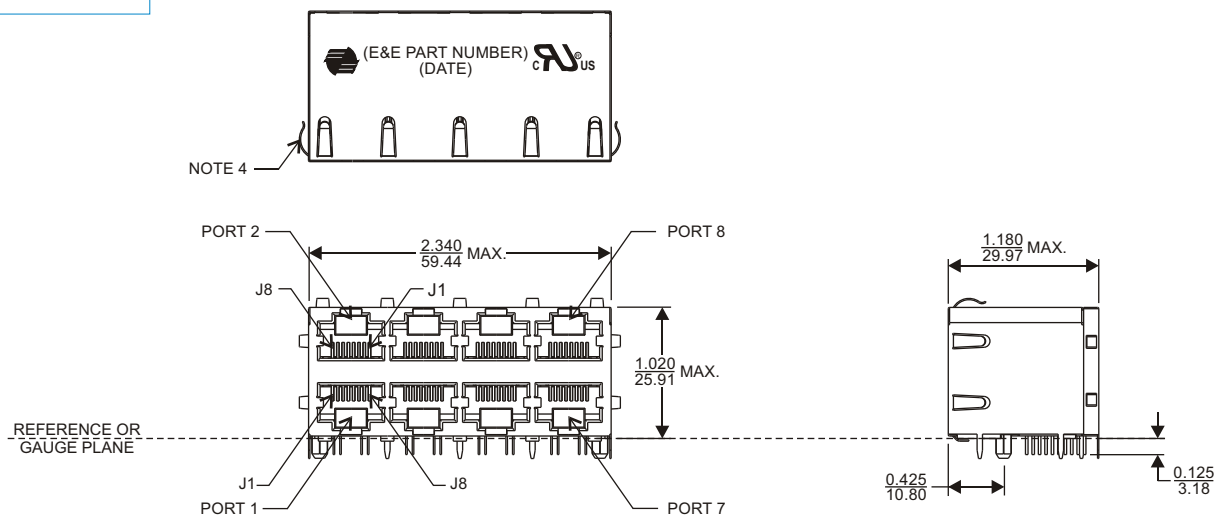
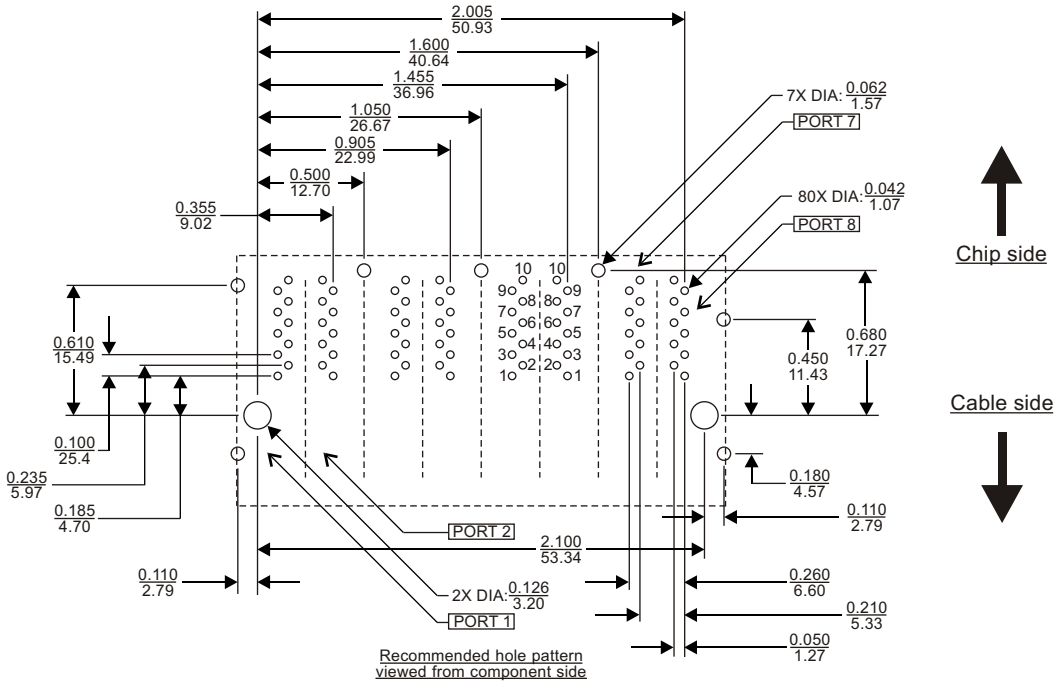
1000 Base-T Applications
Stacked 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ24N-03A+0





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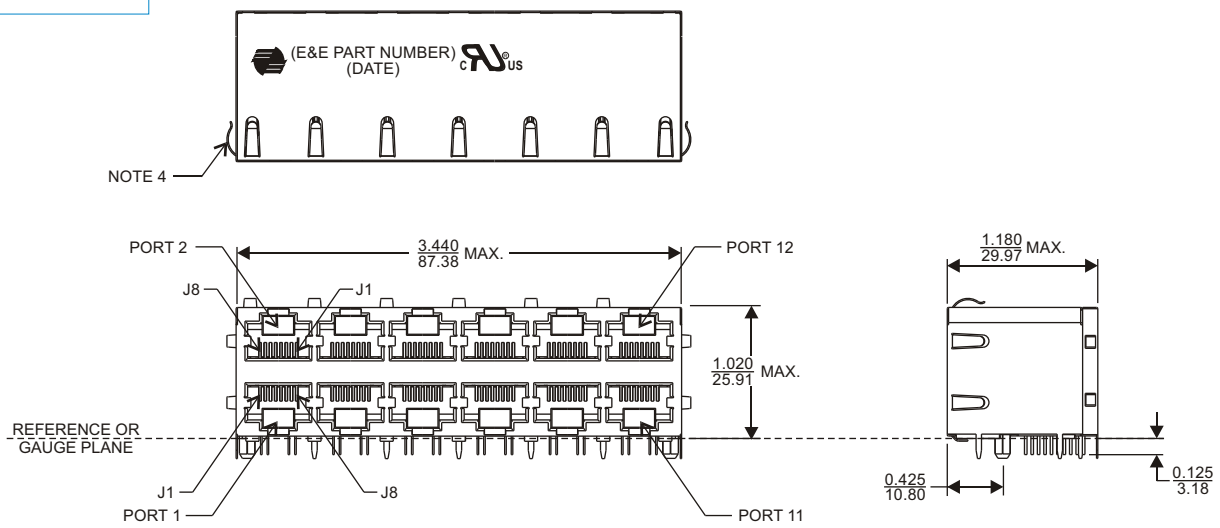
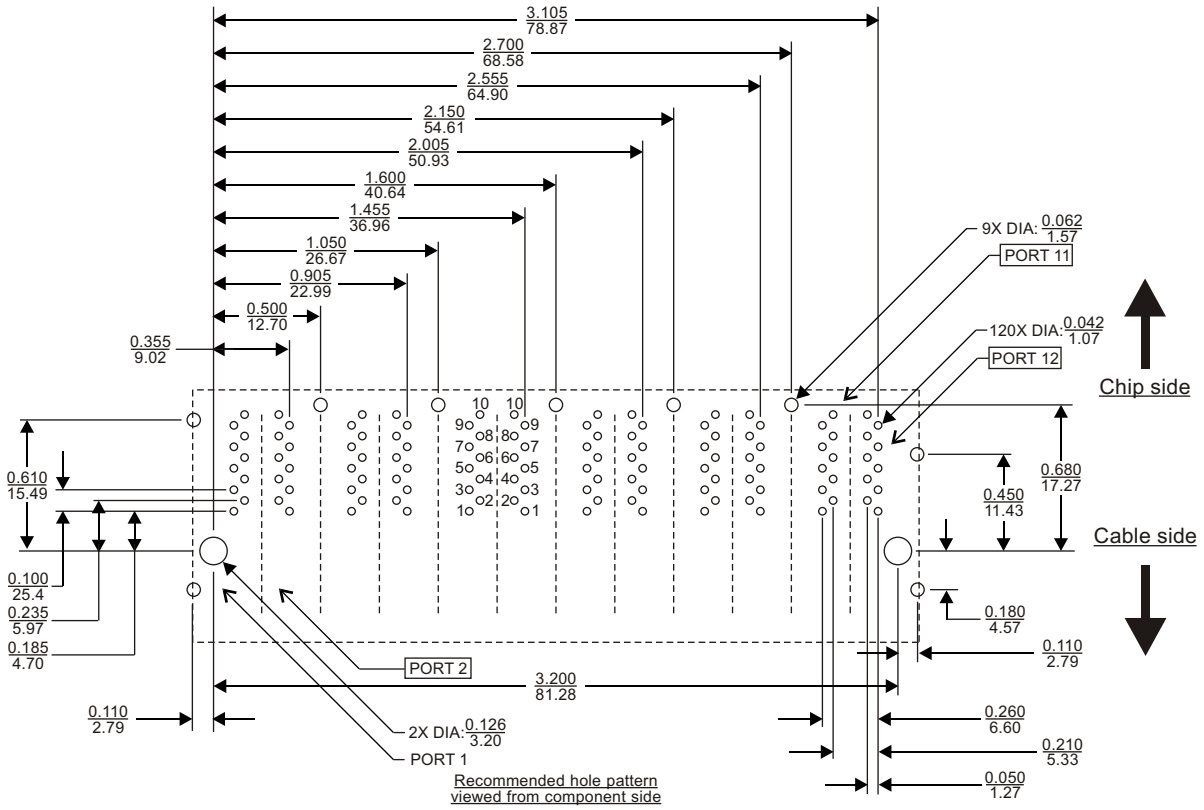
1000 Base-T Applications
Stacked 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ26N-03A+0





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Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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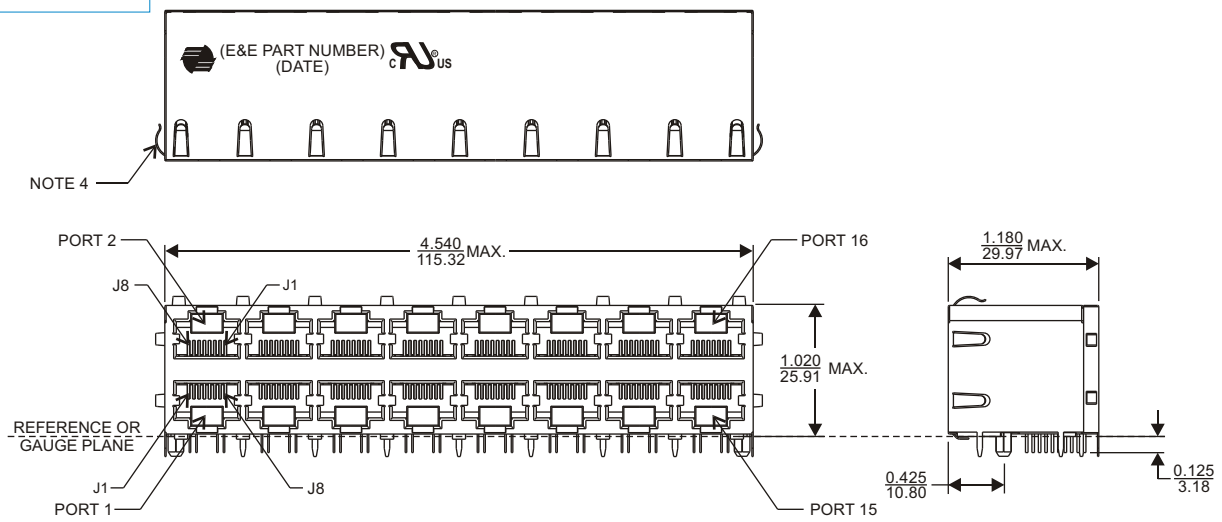
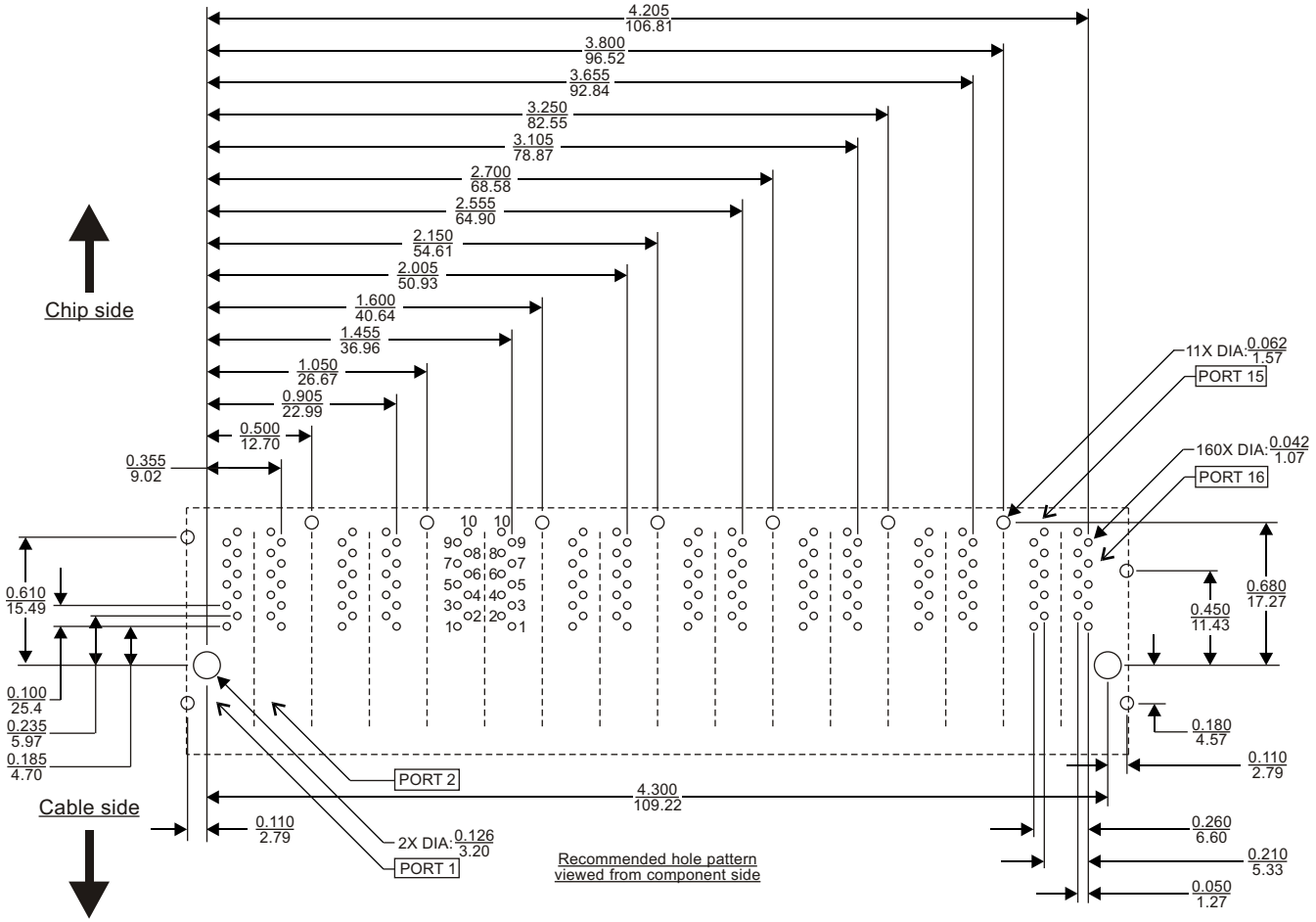
Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Stacked 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ28N-03A+0





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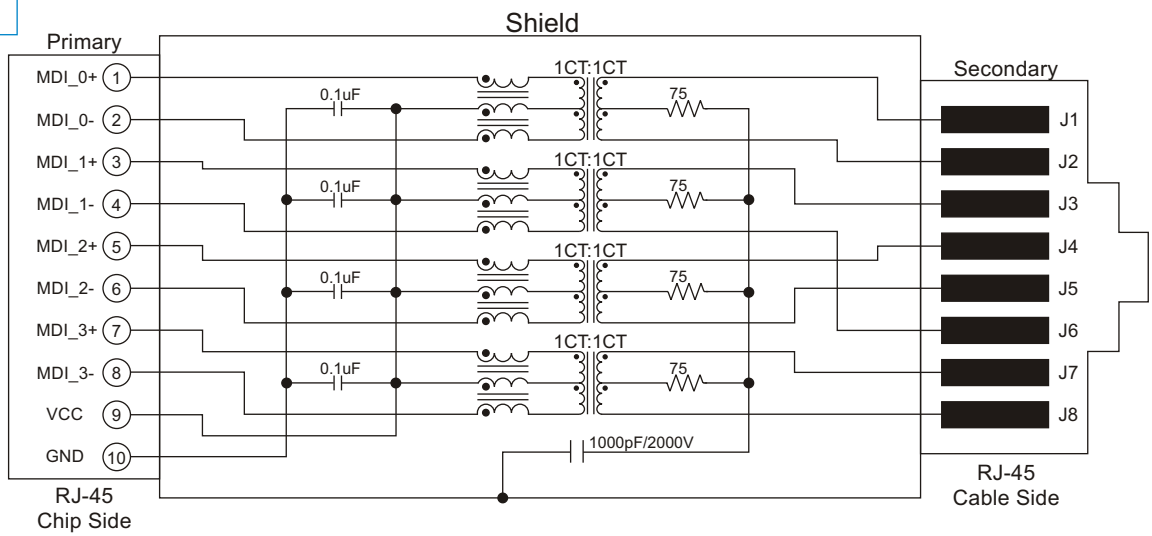
1000 Base-T Applications
Stacked 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern

SCHEMATICS(EACH PORT)

G115



MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[5]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
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Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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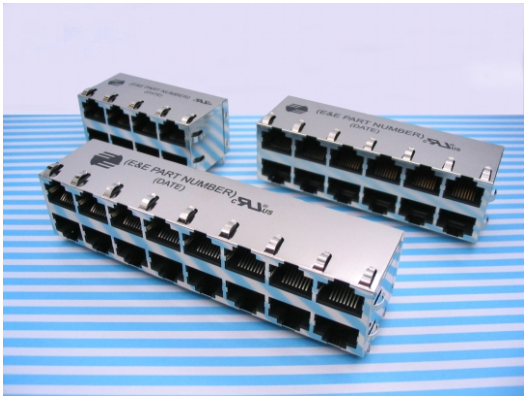
Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
2XN Stacked, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3af standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3af
- 350mA balanced DC line current capability
- Designed for Power over Ethernet (PoE) enabled Switch / Router / Hub applications
- Enhanced performance on EMI suppression with metal shield
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



GENERAL ELECTRICAL SPECIFICATION @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)		Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	0.5-40MHz	40-100MHz	0.1-100MHz	
1.5	16.0	10.0	30.0	1500

PART NUMBER TABLE

Part Number [3]	Turn Ratio (±3%) (Chip : Cable)	Configuration [4]	Platform	Mechanical Package	Schematic
MJR24N2NNA2-E7102	1CT:1	TCA	2x4	MJ24N-07A	E7102
MJR26N2NNA2-E7102	1CT:1	TCA	2x6	MJ26N-07A	E7102
MJR28N2NNA2-E7102	1CT:1	TCA	2x8	MJ28N-07A	E7102

Notes:

1. Ordering Information: MJR24N2NNA2-abbbbc/MJR26N2NNA2-abbbbc/MJR28N2NNA2-abbbbc.
   - MJR24N2NNA2 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2NNA2 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2NNA2 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - abbbb = Schematic code(E7102).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. "F" represents the test frequency specified in MHz.
3. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
4. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

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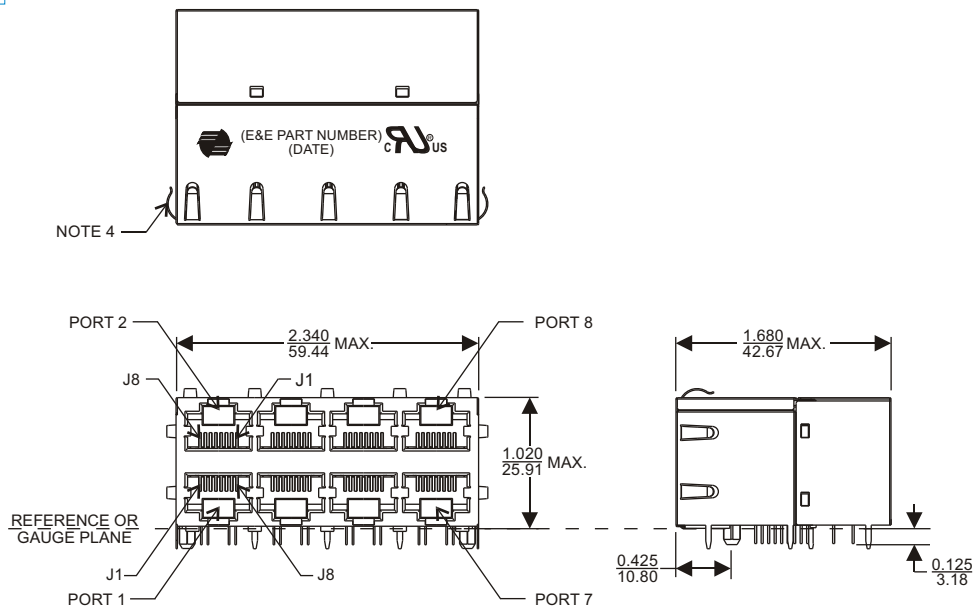
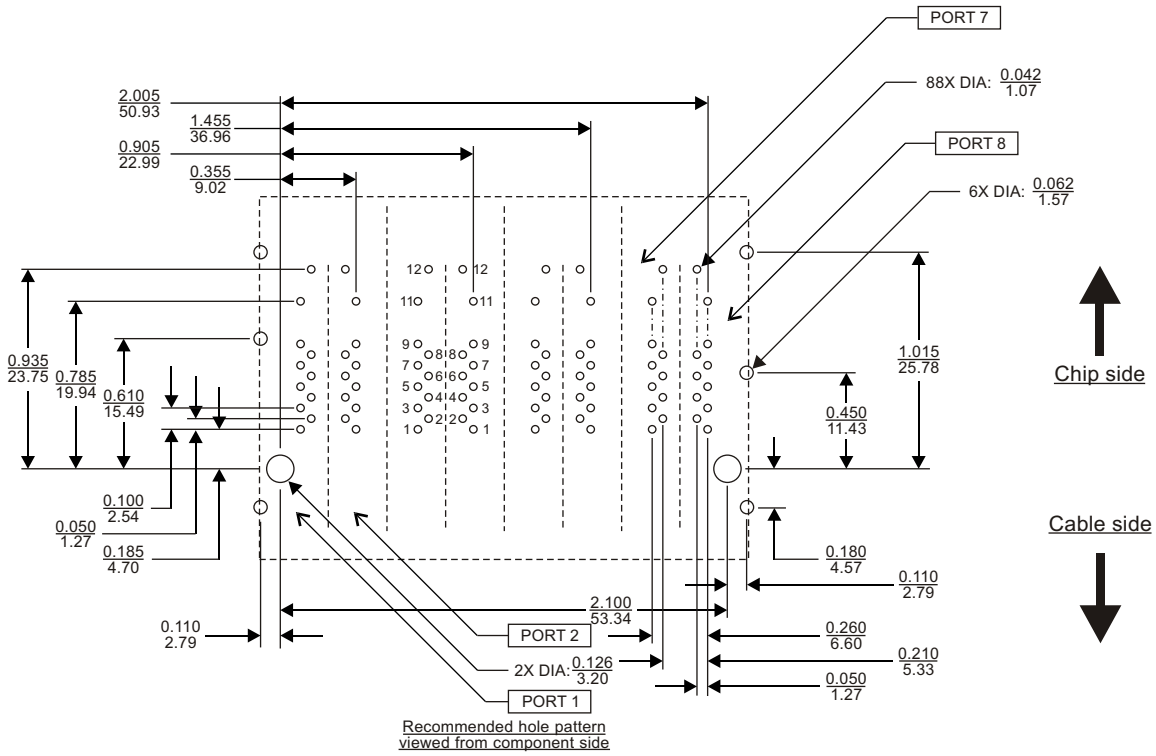
1000 Base-T Applications
2XN Stacked, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

MECHANICAL DIMENSIONS

MJ24N-07A





All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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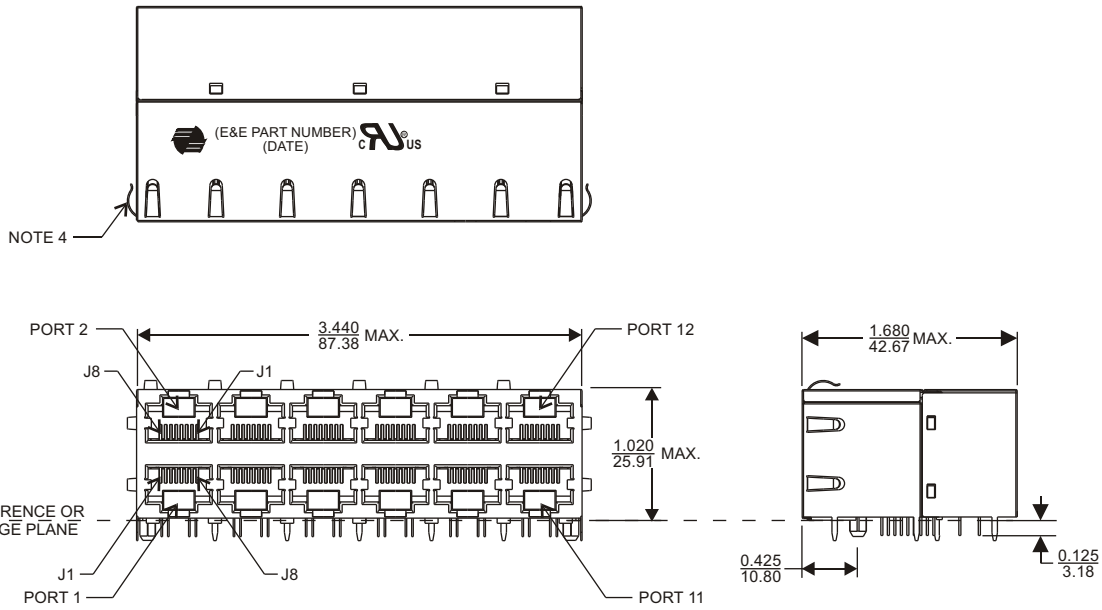
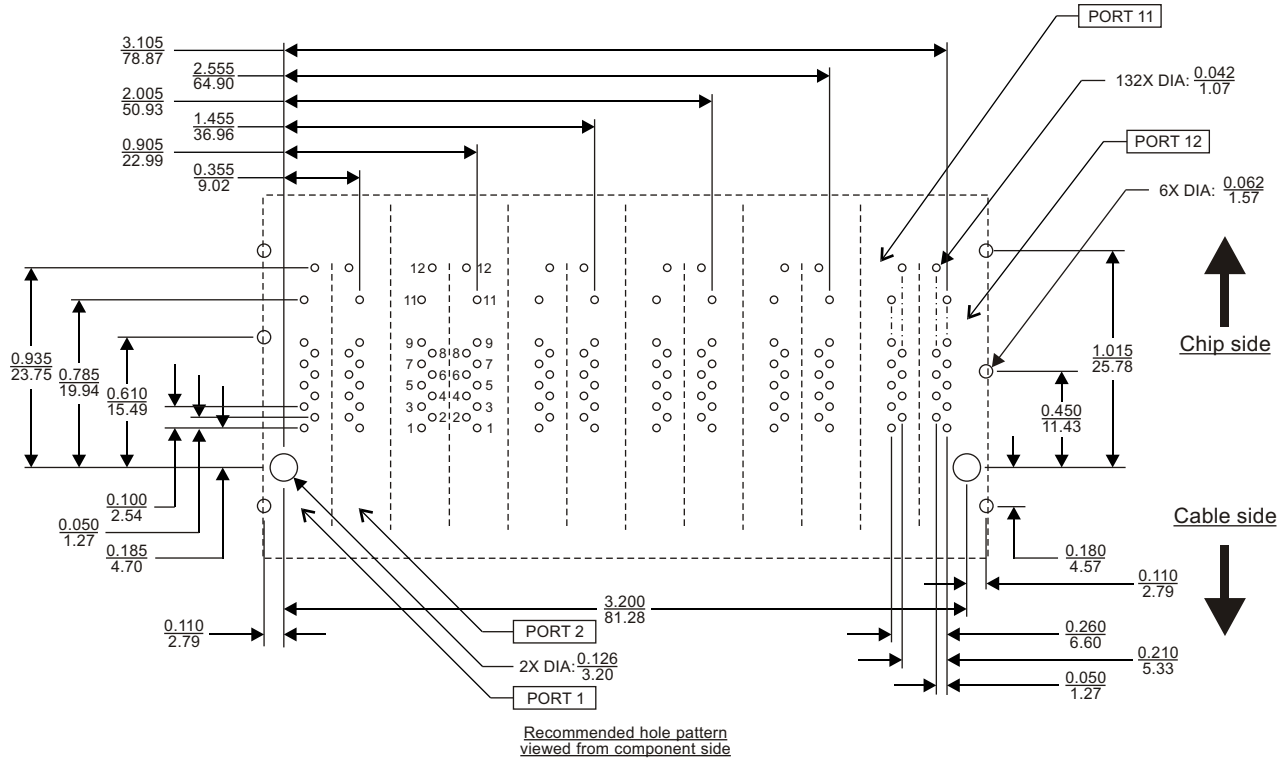
1000 Base-T Applications
2XN Stacked, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

MECHANICAL DIMENSIONS

MJ26N-07A





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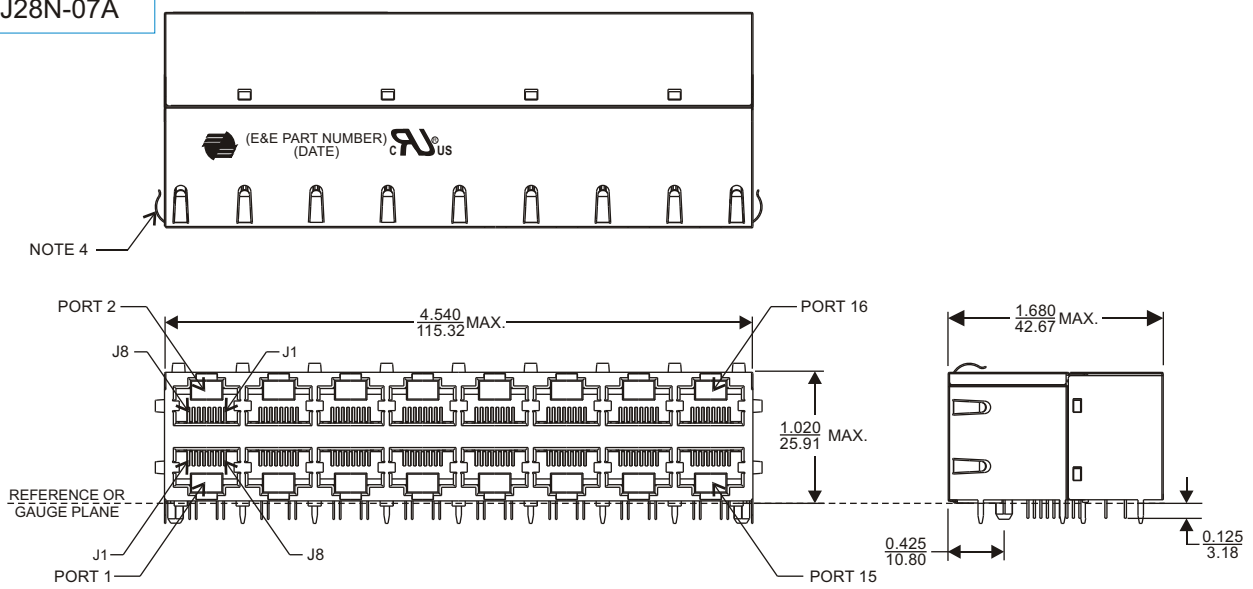
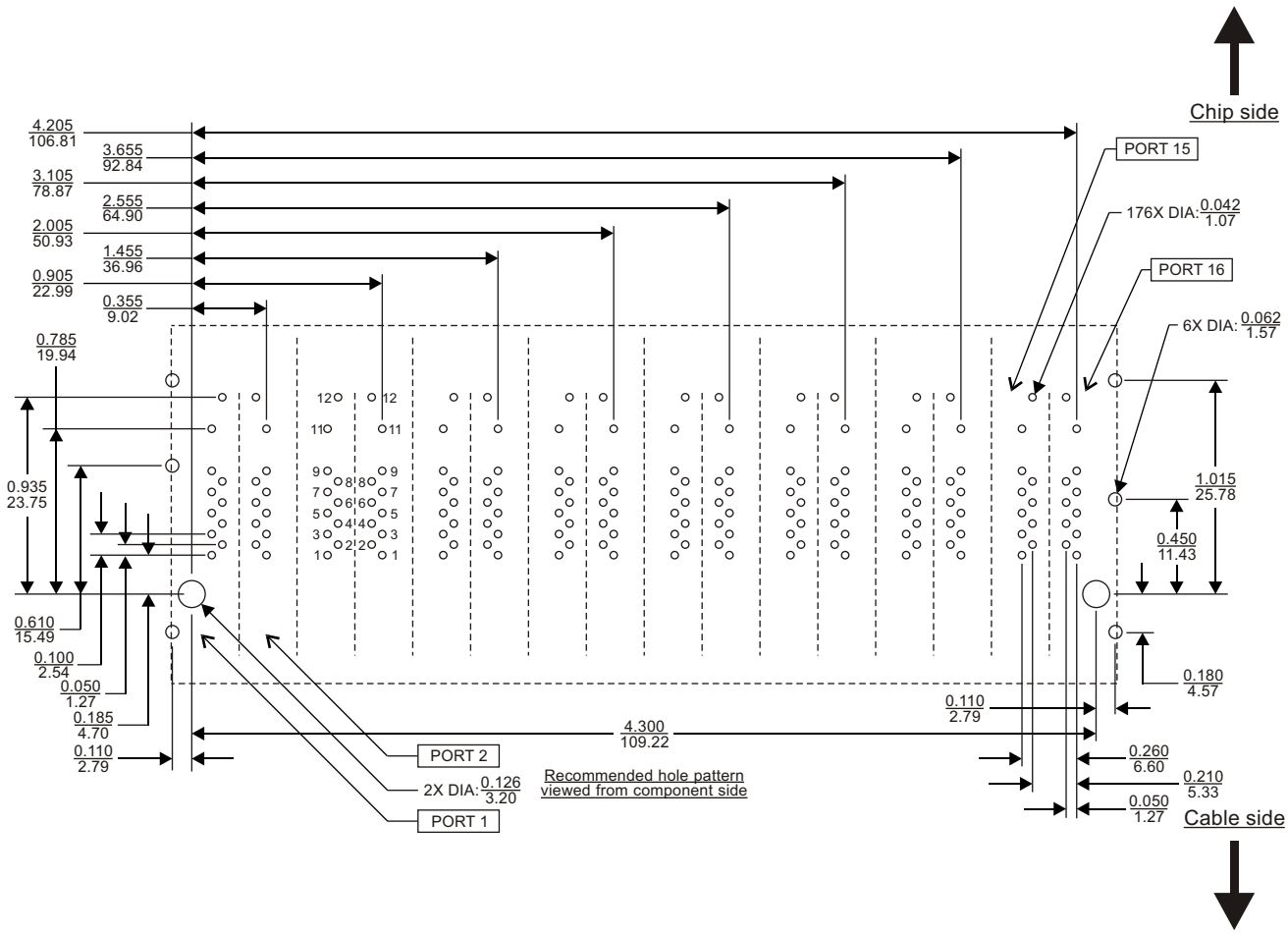
1000 Base-T Applications
2XN Stacked, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

MECHANICAL DIMENSIONS

MJ28N-07A





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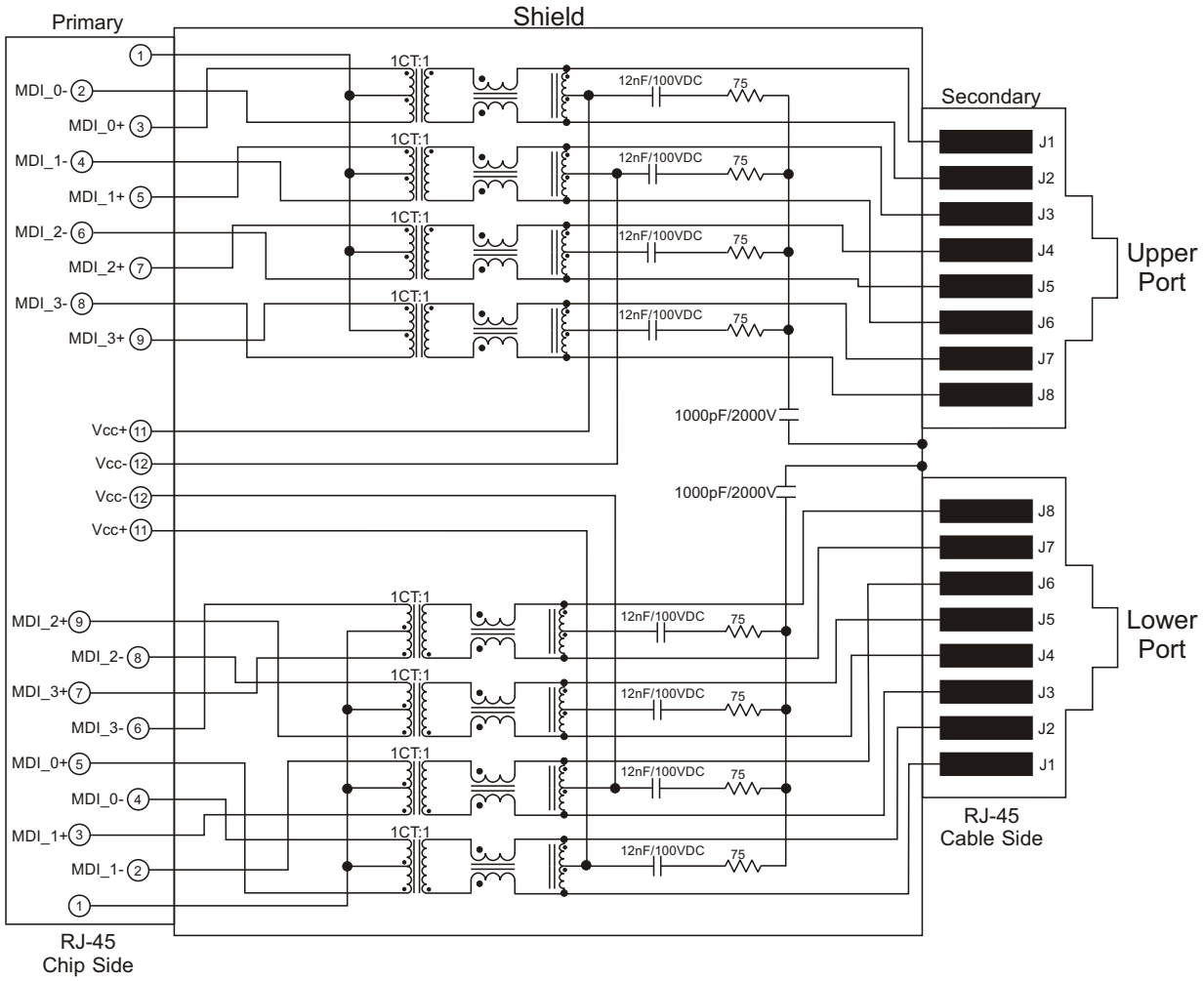
1000 Base-T Applications
2XN Stacked, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

SCHEMATICS(EACH PAIR PORT)

E7102



MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

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Tel: (852) 2954 3333 Fax: (852) 2954 3304
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Website: http://www.eleceltek.com / www.eemagnetic.com

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Elec & Eltek依利安達
E & E Magnetic Products Limited

1000 Base-T Applications
Stack 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3af standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- 350mA balanced DC line current capability
- Designed for Power over Ethernet (PoE) enabled Switch / Router / Hub applications
- Enhanced performance on EMI suppression with metal shield
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)		Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	0.5-40MHz	40-100MHz	0.1-100MHz	
1.5	16.0	10.0	30.0	1500

Part Number Table

Part Number[2]	Turn Ratio (±3%) (Chip : Cable)	Configuration[3]	LED[4] (Left / Right)	Mechanical Package	Schematic
MJR24N2DDA3-E7102	1CT:1	TCA	D / D	MJ24N-07B	E7102
MJR26N2DDA3-E7102	1CT:1	TCA	D / D	MJ26N-07B	E7102
MJR28N2DDA3-E7102	1CT:1	TCA	D / D	MJ28N-07B	E7102

Notes:

1. Ordering Information: MJR24N2DDA3-abbbbc/MJR26N2DDA3-abbbbc/MJR28N2DDA3-abbbbc.
   - MJR24N2DDA3 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2DDA3 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2DDA3 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - abbbb = Schematic code(E7102).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer .
4. LEDs (Left / Right) : "D" = Orange & Green bi-color (2 terminals type). For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

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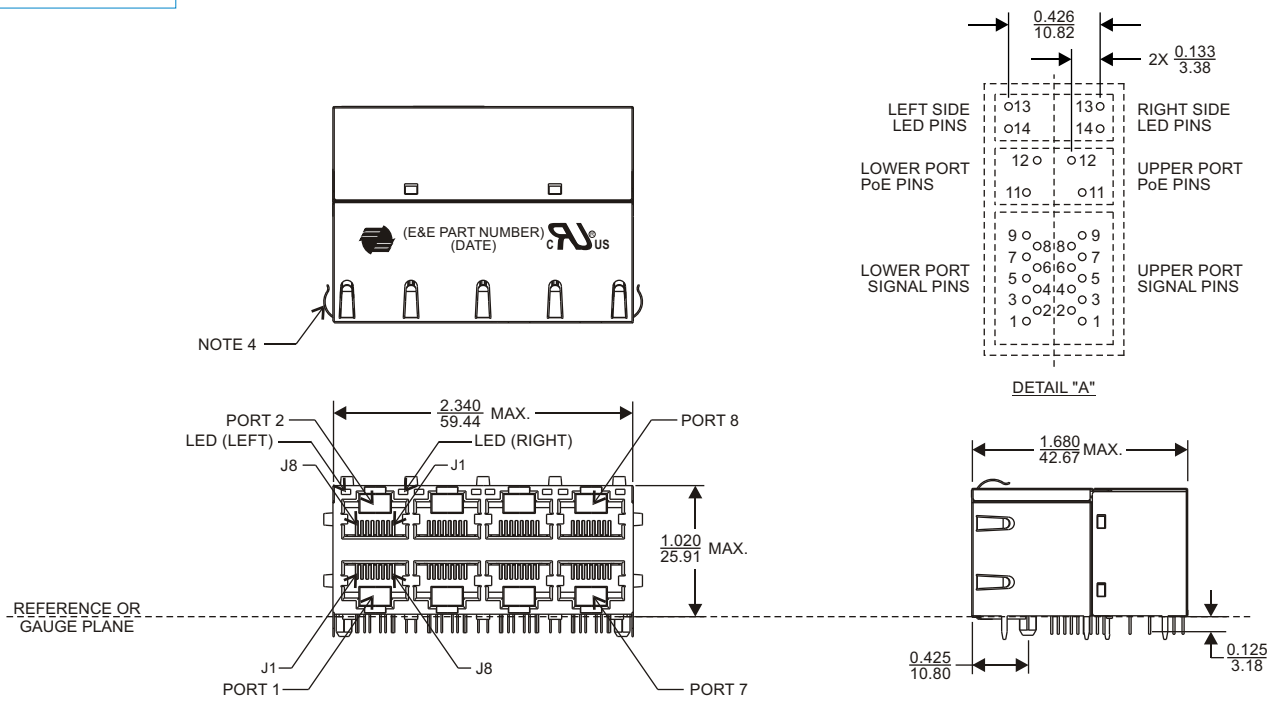
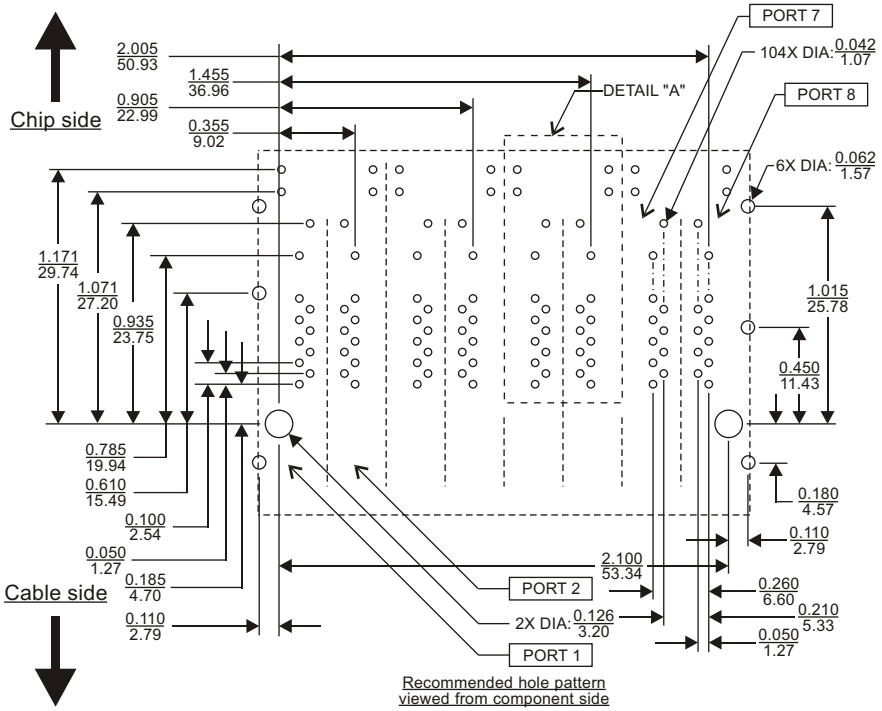
1000 Base-T Applications
Stack 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

MECHANICAL DIMENSIONS

MJ24N-07B





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Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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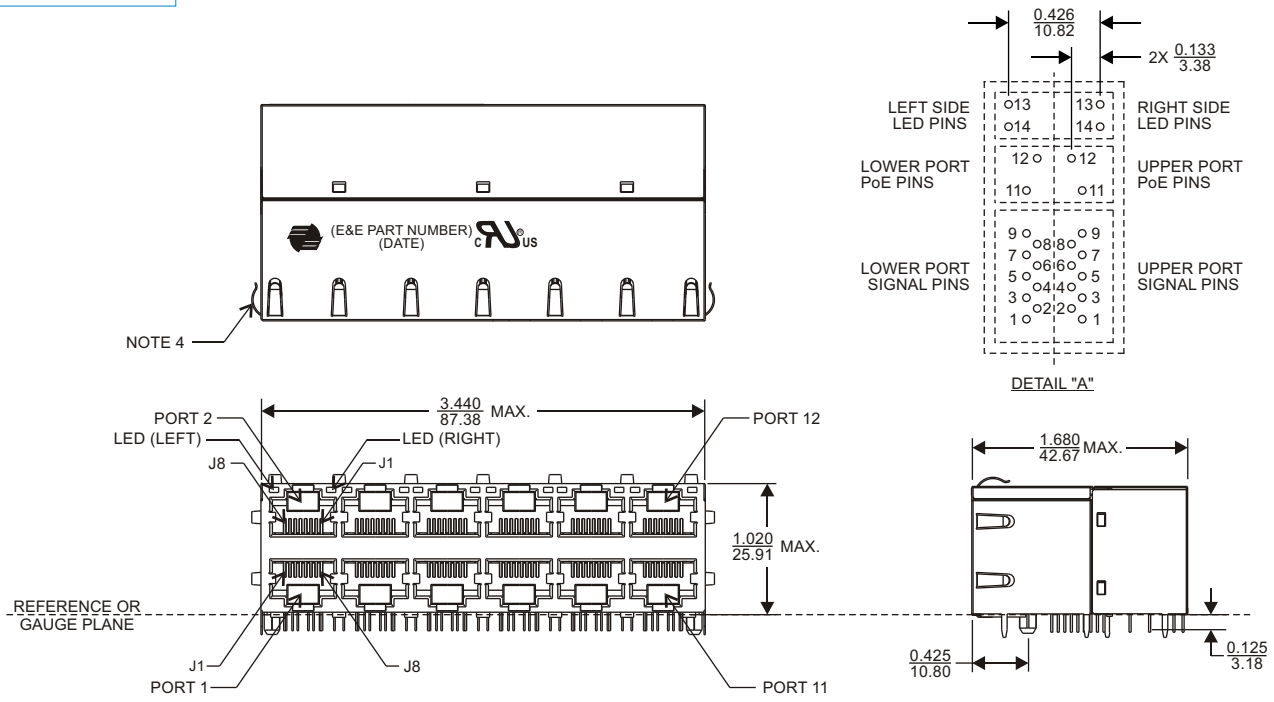
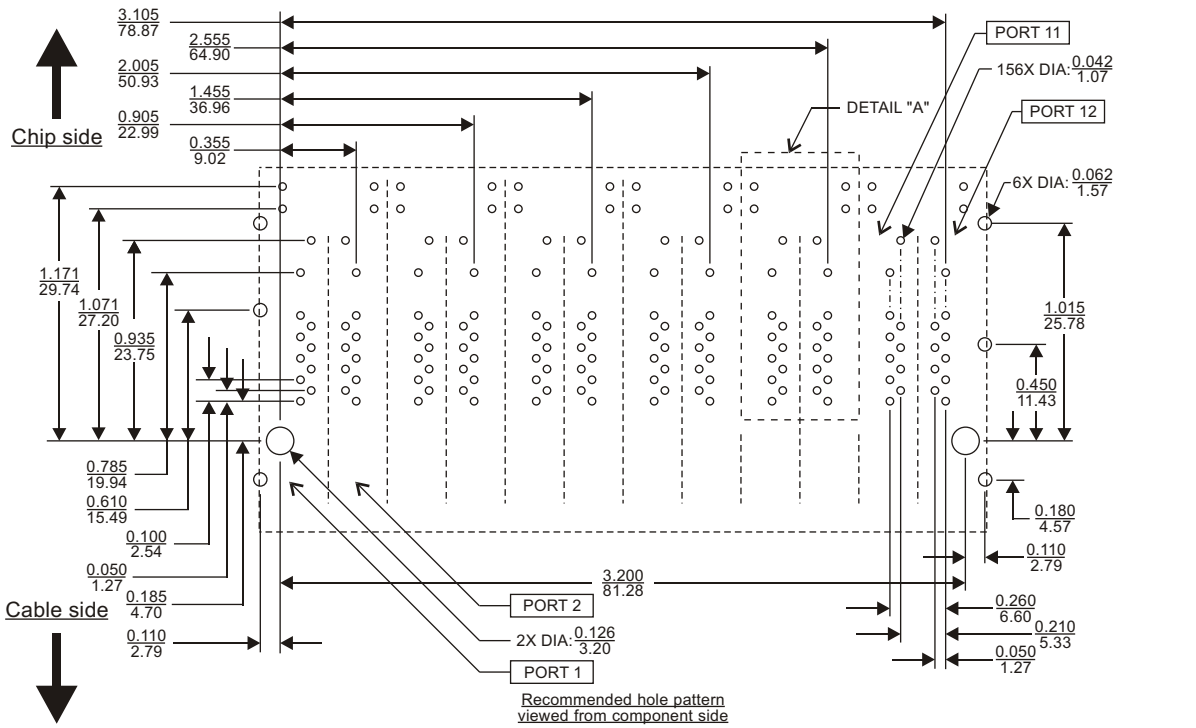
1000 Base-T Applications
Stack 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

MECHANICAL DIMENSIONS

MJ26N-07B





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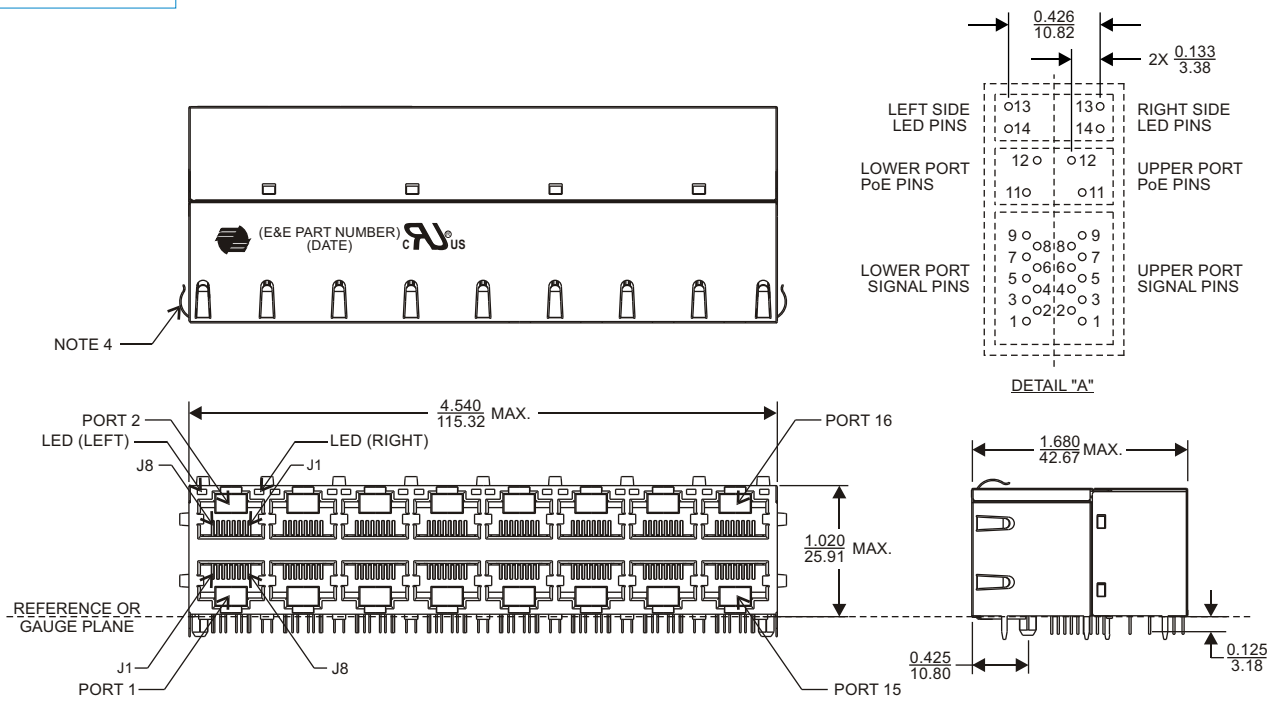
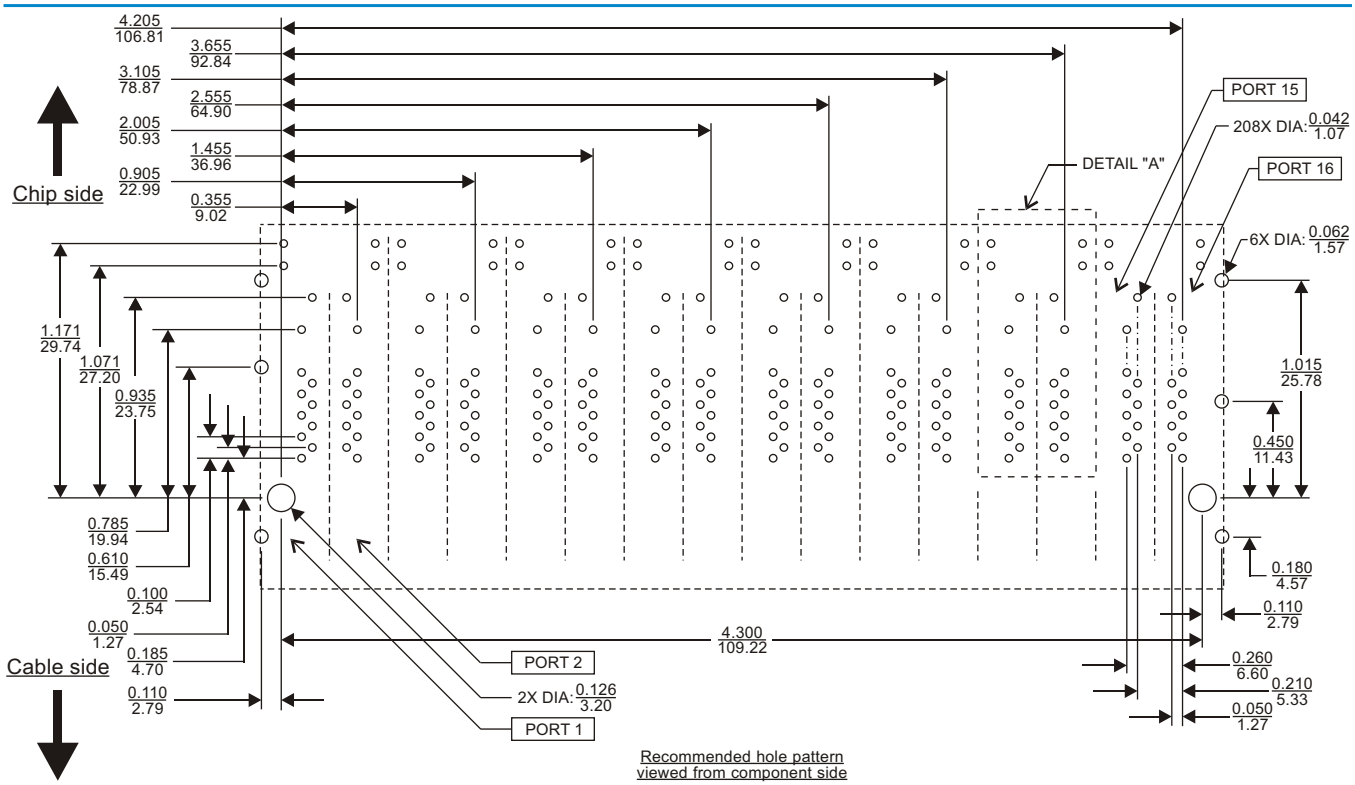
E & E Magnetic Products Limited

1000 Base-T Applications
Stack 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

MECHANICAL DIMENSIONS

MJ28N-07B





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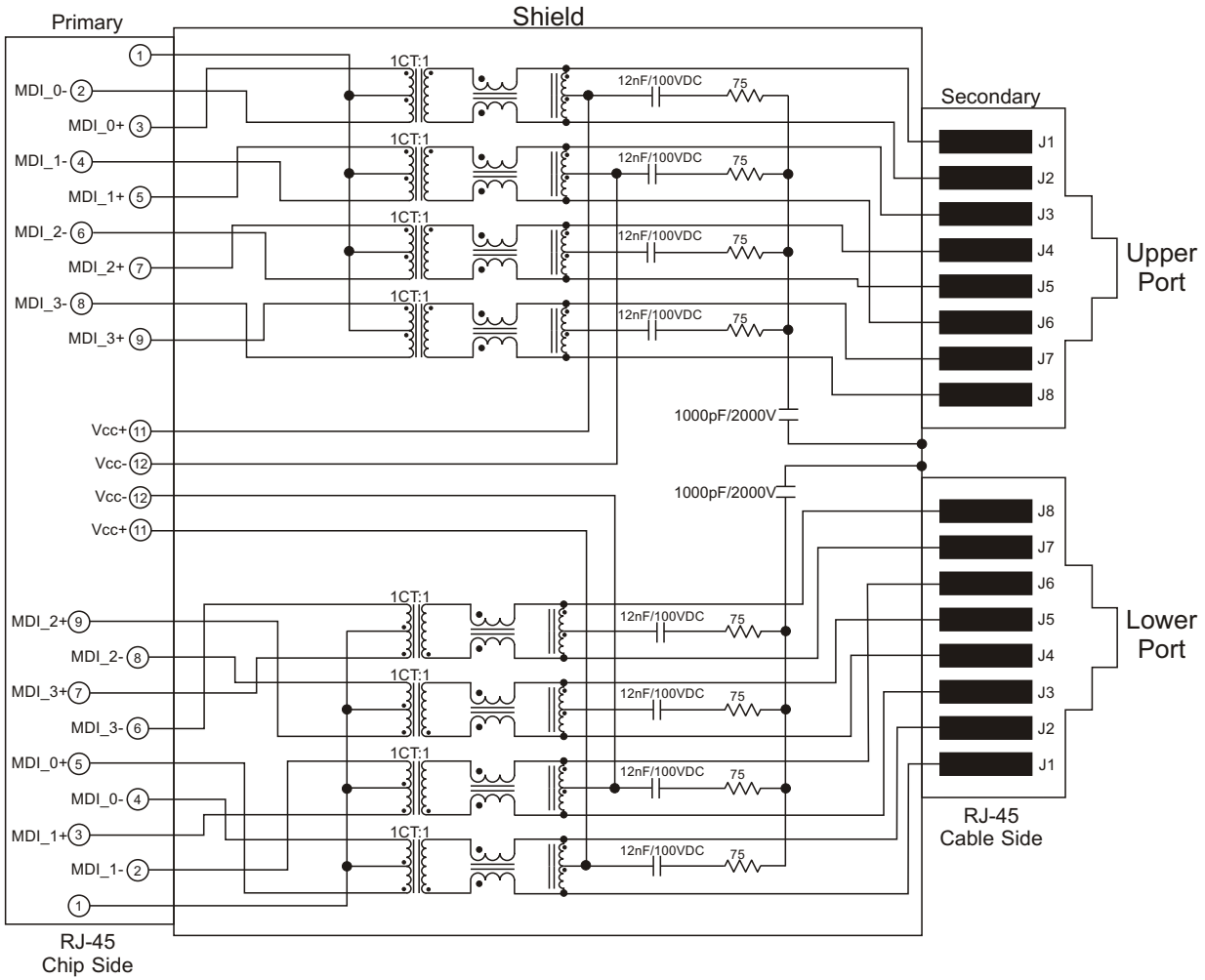
1000 Base-T Applications
Stack 2XN, Through Hole
Vertical-row Of Zigzag Output Pins Pattern
(With PoE Feature)

SCHEMATICS (EACH PAIR PORT)

E7102



MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11U2GYA5-H301	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ11U-01A	H301
MJR11U2GYA5-H30G	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11U-01A	H30G[5]
MJR11U2GYA5-H30H	1CT:1	1CT:1CT	TCA	TC	G / Y	MJ11U-01A	H30H
MJR11U2GYA5-H30Y	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11U-01A	H30Y[5]
MJR11U2GYA5-H33D	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11U-01A	H33D[5]
MJR11U2GYA5-H701	1CT:1.41	1CT:1CT	TCA	CT	G / Y	MJ11U-01A	H701
MJR11U2GYA5-K30Y[7]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11U-01A	K30Y[5]
MJR11U2GYA5-K33D[7]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11U-01A	K33D[5]
MJR11U2NNA0-H301	1CT:1	1CT:1CT	TCA	CT	—	MJ11U-01B	H301
MJR11U2NNA0-H30G	1CT:1CT	1CT:1CT	TC	TC	—	MJ11U-01B	H30G[5]
MJR11U2NNA0-H30H	1CT:1	1CT:1CT	TCA	TC	—	MJ11U-01B	H30H
MJR11U2NNA0-H30Y	1CT:1CT	1CT:1CT	TC	TC	—	MJ11U-01B	H30Y[5]
MJR11U2NNA0-H33D	1CT:1CT	1CT:1CT	TC	TC	—	MJ11U-01B	H33D[5]
MJR11U2NNA0-H701	1CT:1.41	1CT:1CT	TCA	CT	—	MJ11U-01B	H701
MJR11U2NNA0-K30Y[7]	1CT:1CT	1CT:1CT	TC	TC	—	MJ11U-01B	K30Y[5]
MJR11U2NNA0-K33D[7]	1CT:1CT	1CT:1CT	TC	TC	—	MJ11U-01B	K33D[5]

Notes:

1. Ordering Information: MJR11U2GYA5-abbbc/MJR11U2GYA5-abbbc.
   - MJR11U2GYA5 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11U2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - Abbb = Schematic code(H301/H30G/H30H/H30Y/H33D/H701/K30Y/K33D).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; " – " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Schematic H30G, H30Y, H33D, K30Y, K33D are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. Operating temperature: -40°C to +85°C.

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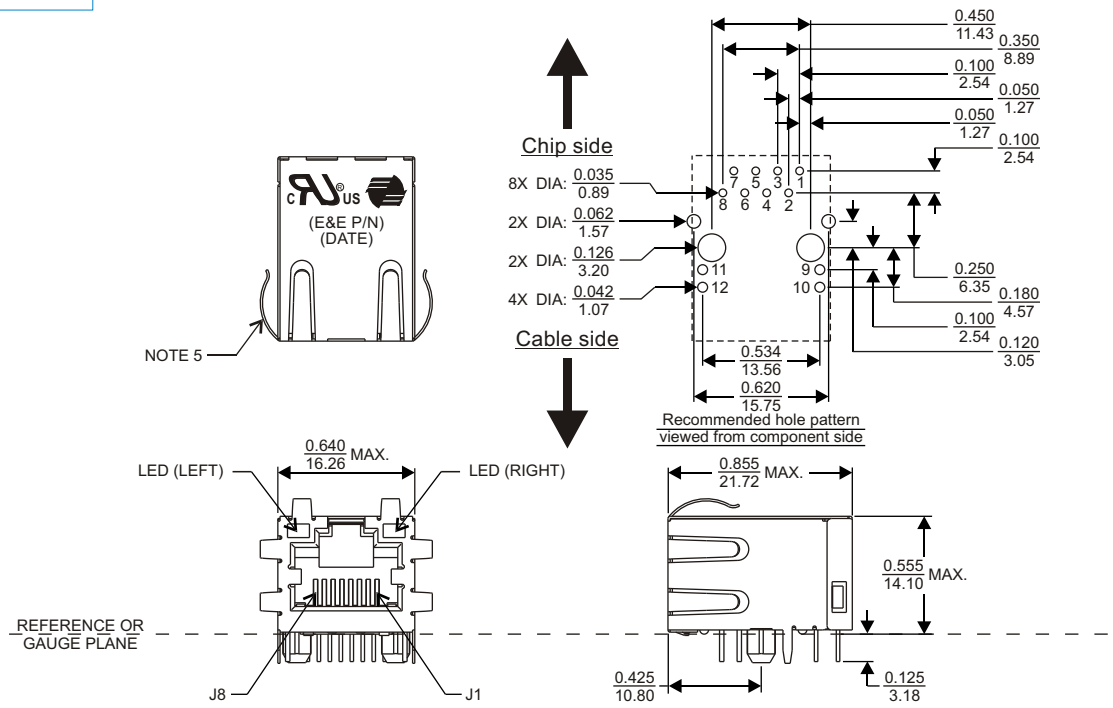
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ11U-01A



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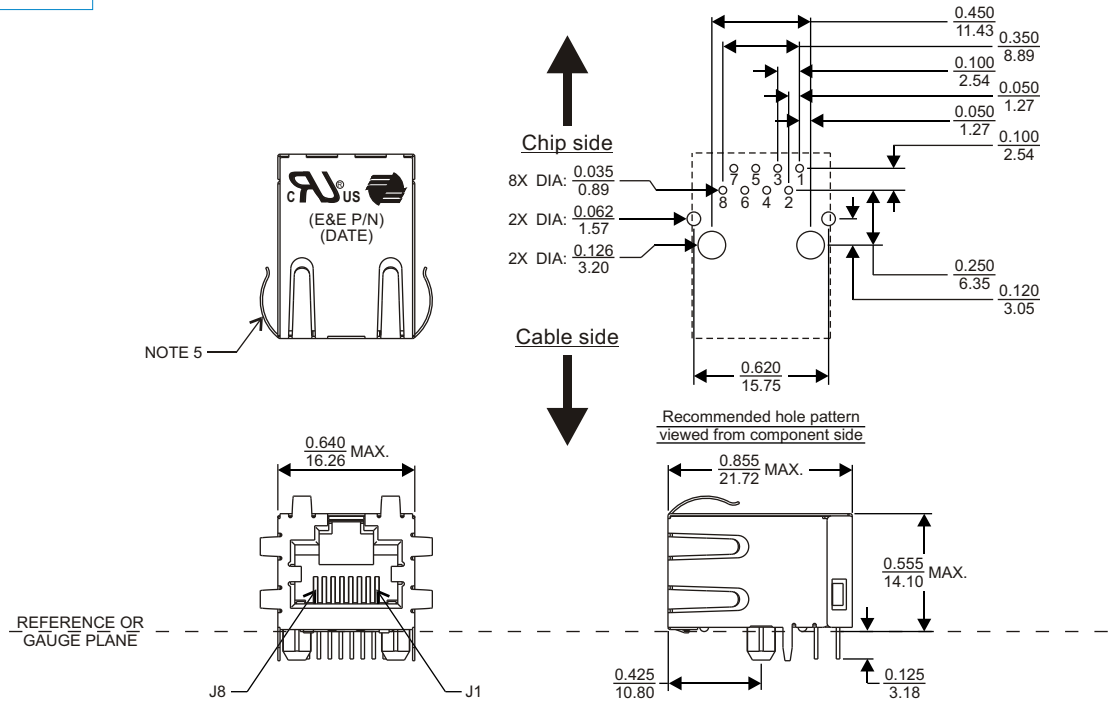

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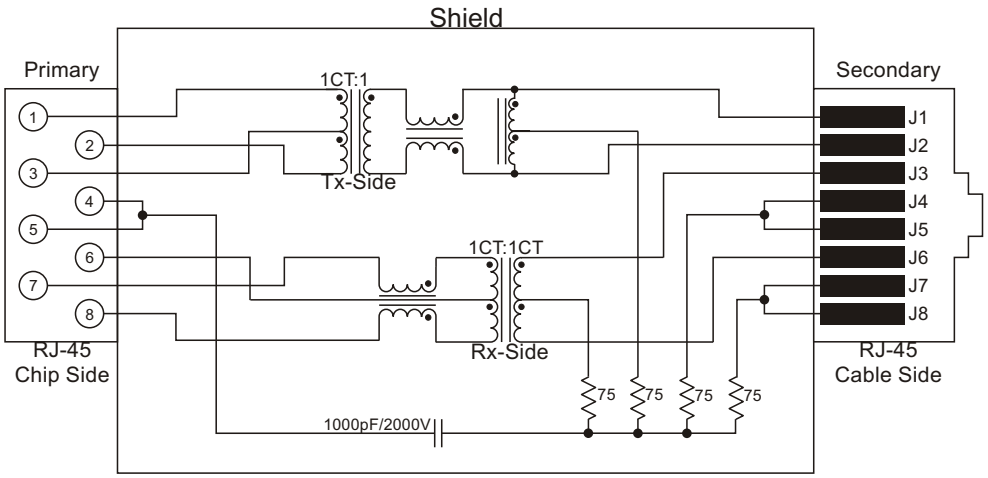
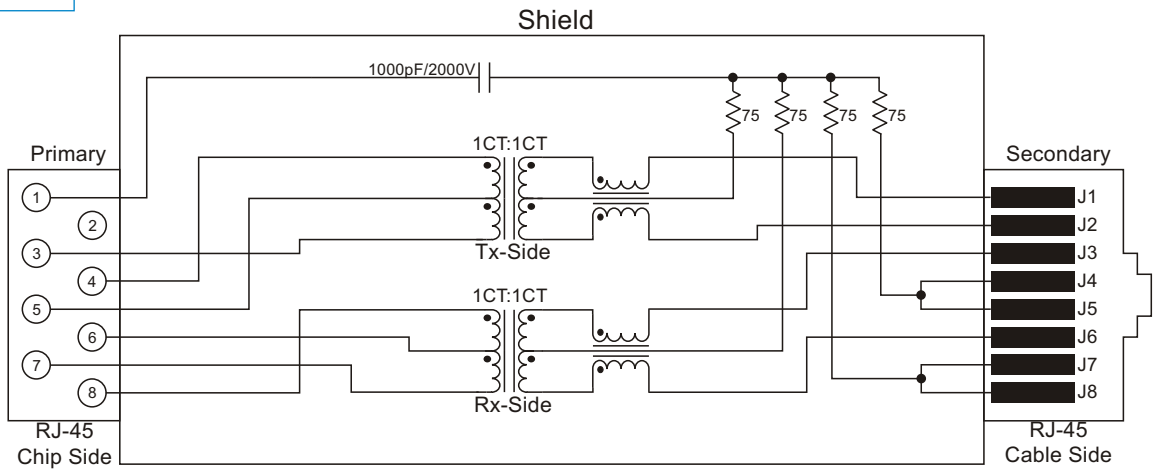
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

SCHEMATICS

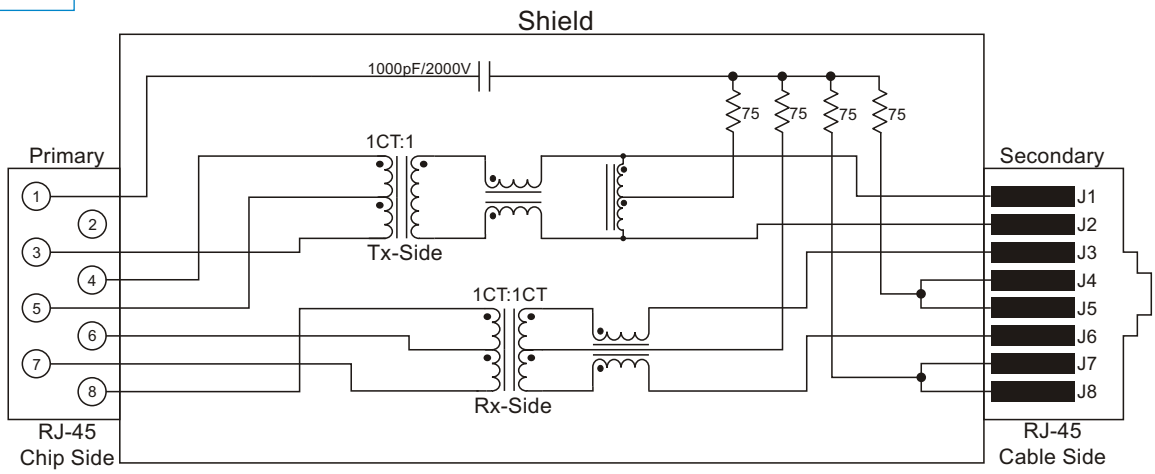
H301



H30G



H30H



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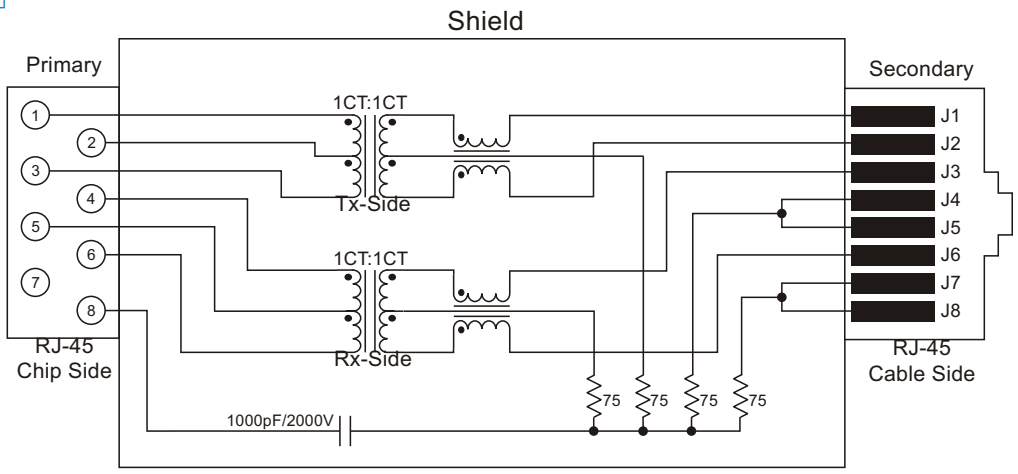
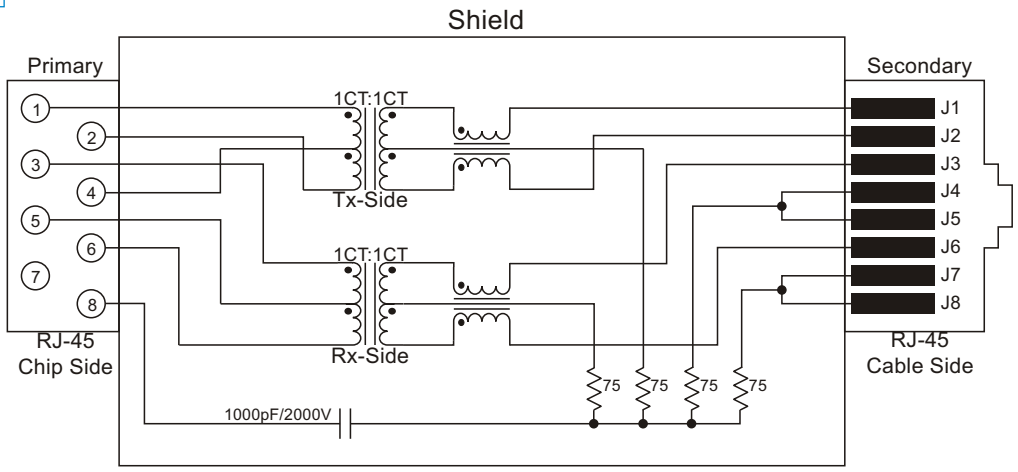
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

SCHEMATICS

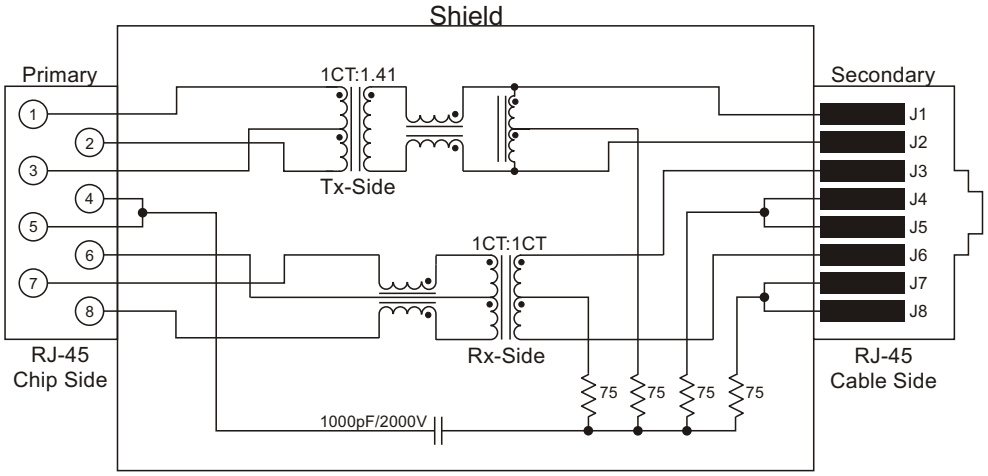
H30Y / K30Y



H33D / K33D



H701



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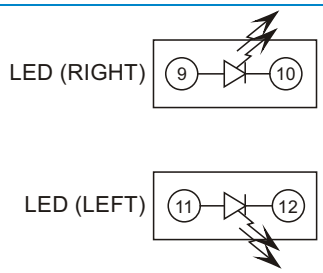
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Zigzag Output Pins Pattern

LEDs Color And Polarity

MJ11U-01A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 9	PIN 10
	GREEN	+	—	YELLOW	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

Notes:

7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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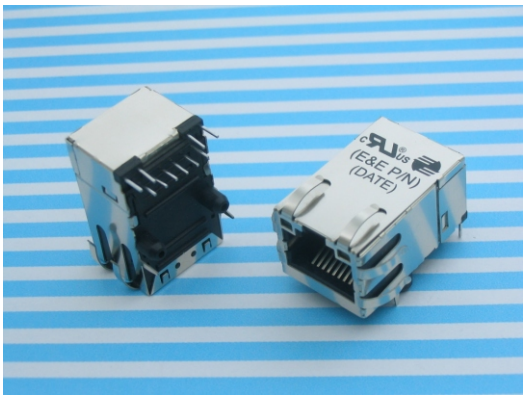
Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern (With LED)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 H OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number [2]	Turn Ratio (Chip : Cable) (±3%)		Configuration [3]		LED [4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11U2GYA4-H34K	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11U-03A	H34K [5]
MJR11U2GYA4-H34U	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ11U-03A	H34U
MJR11U2GYA4-K34K [8]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11U-03A	K34K [5]

Notes:

1. Ordering Information: MJR11U2GYA4-abbbc.
   MJR11U2GYA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   abbb = Schematic code(H34K/H34U).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Schematic H34K, K34K are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
8. Operating temperature: -40°C to +85°C.

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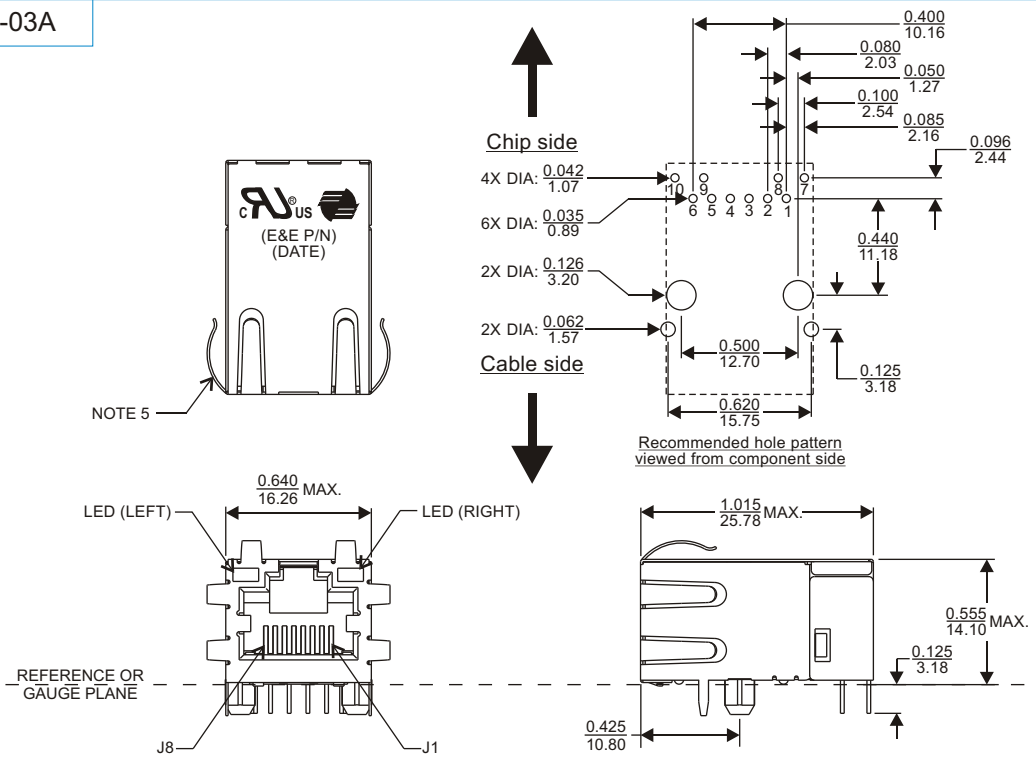
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern (With LED)

MECHANICAL DIMENSIONS

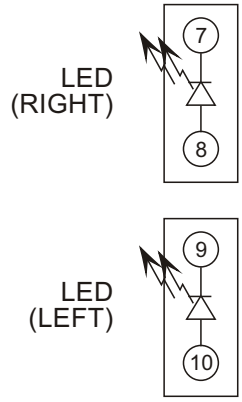
MJ11U-03A



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm\frac{0.010}{0.25}$.

LEDS COLOR AND POLARITY

MJ11U-03A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 10	PIN 9		PIN 8	PIN 7
	GREEN	+	—	YELLOW	+	—

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

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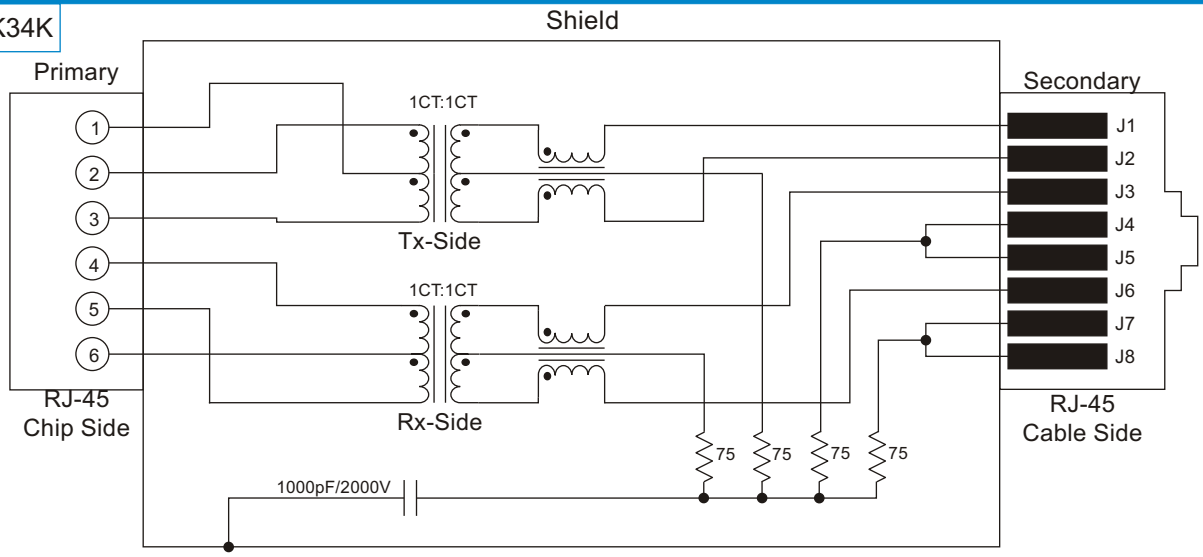
E & E Magnetic Products Limited

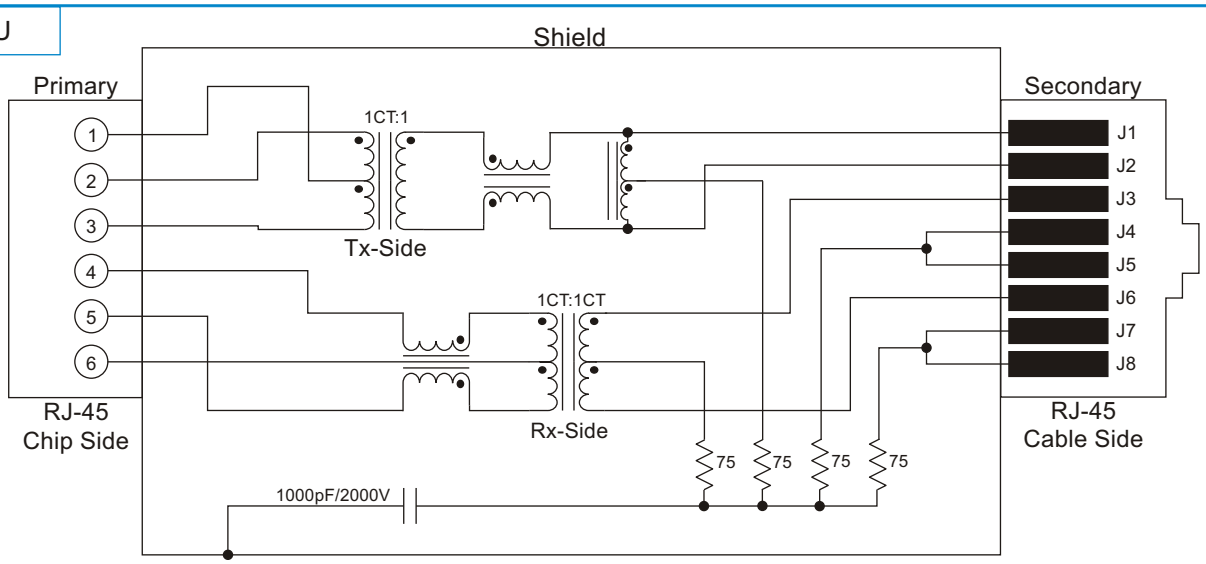
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern (With LED)

SCHEMATICS

H34K / K34K



H34U



MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern (Without LED)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11U2NNA4-H34K	1CT:1CT	1CT:1CT	TC	TC	—	MJ11U-02A	H34K[5]
MJR11U2NNA4-H34U	1CT:1	1CT:1CT	TCA	CT	—	MJ11U-02A	H34U
MJR11U2NNA4-K34K[8]	1CT:1CT	1CT:1CT	TC	TC	—	MJ11U-02A	K34K[5]

Notes:

1. Ordering Information: MJR11U2NNA4-abbbc.
   MJR11U2NNA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   abbb = Schematic code(H34K/H34U/K34K).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : " – " = None.
5. Schematic H34K, K34K are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
8. Operating temperature: -40°C to +85°C.

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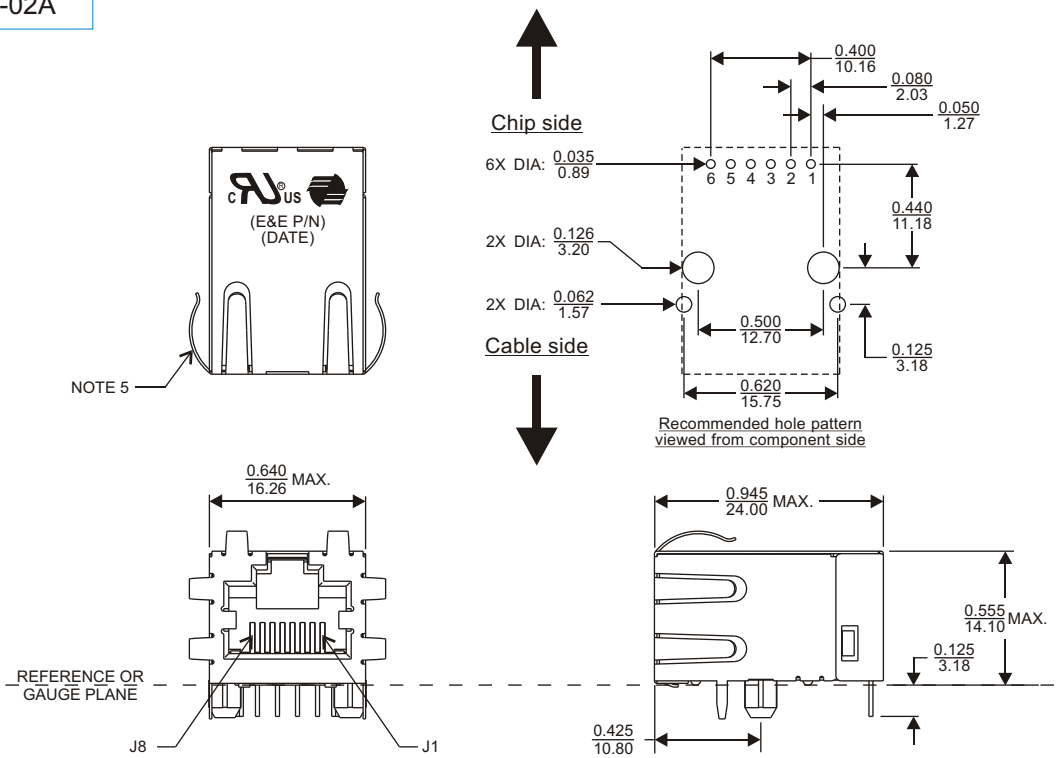
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern (Without LED)

MECHANICAL DIMENSIONS

MJ11U-02A



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm\frac{0.010}{0.25}$.

MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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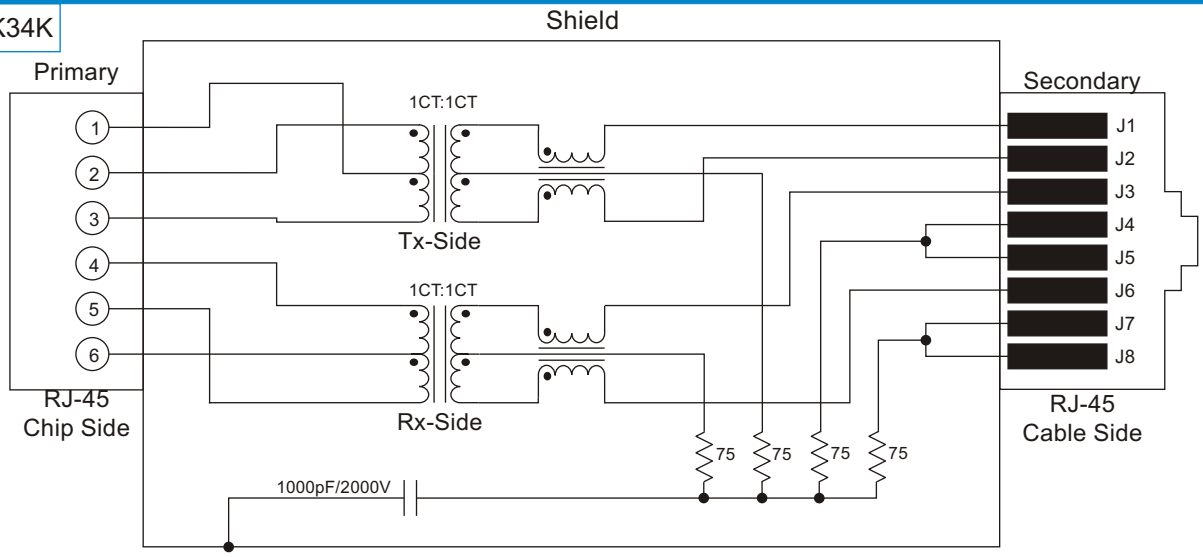
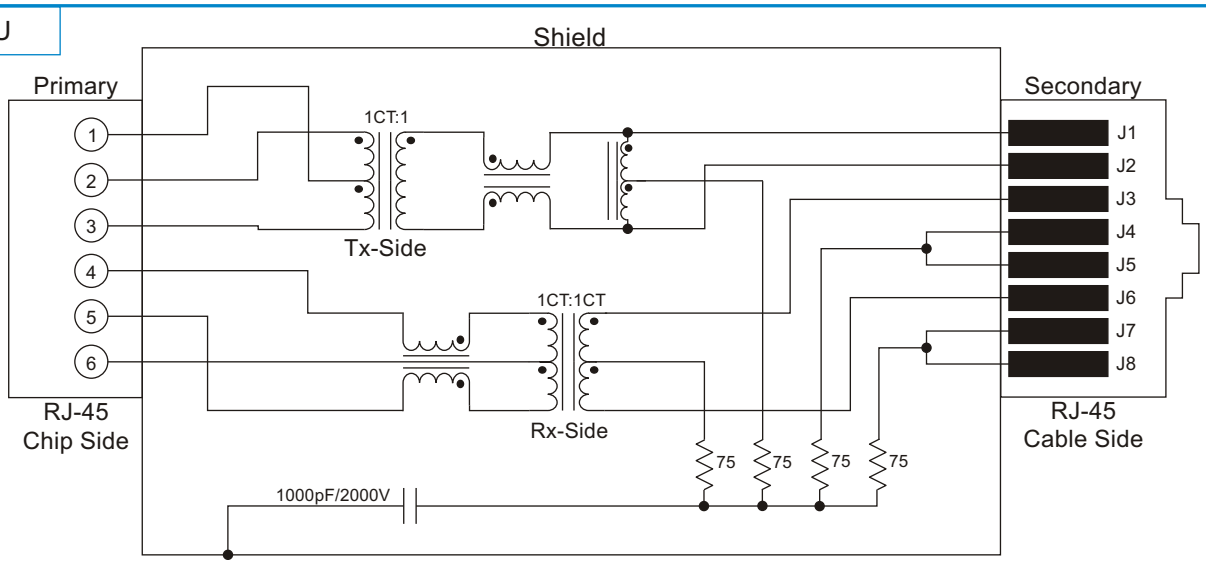
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern (Without LED)

SCHEMATICS

H34K / K34K



H34U



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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10/100 Base-T Applications Single Port, Through Hole, Tab Up Straight-row Output Pins Pattern (With PoE Feature)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3af standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3af
- 350mA balanced DC line current capability
- Designed for Power over Ethernet (PoE) enabled Switch / Router / Hub applications
- Enhanced performance on EMI suppression with metal shield
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.2	16.0	14.0	13.0	12.0	42.0	37.0	33.0	33.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11U2NNA8-VB110	1CT:1CT	1CT:1CT	TS	TS	—	MJ11U-09A	VB110
MJR11U2GYA8-VB110	1CT:1CT	1CT:1CT	TS	TS	G / Y	MJ11U-09B	VB110

Notes:

1. Ordering Information: MJR11U2NNA8-abbbbc/MJR11U2GYA8-abbbbc.
   MJR11U2NNA8 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   MJR11U2GYA8 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   abbbb = Schematic code(VB110).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "S" = Shared Common-mode choke
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; " — " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

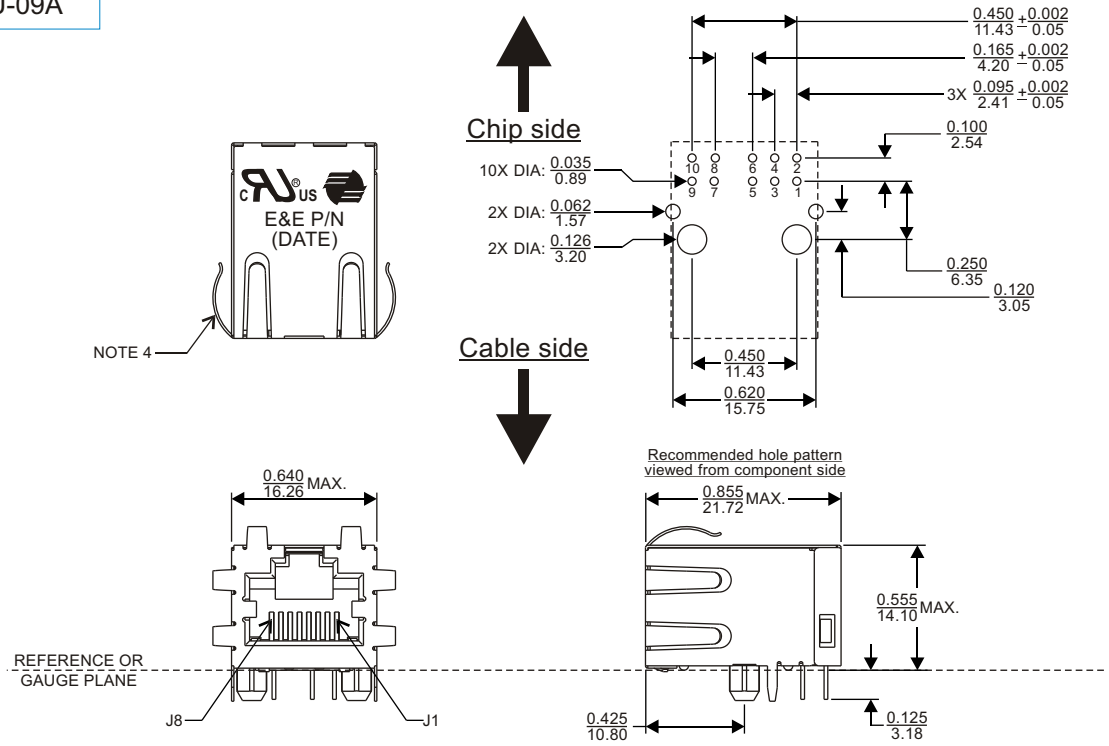
Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

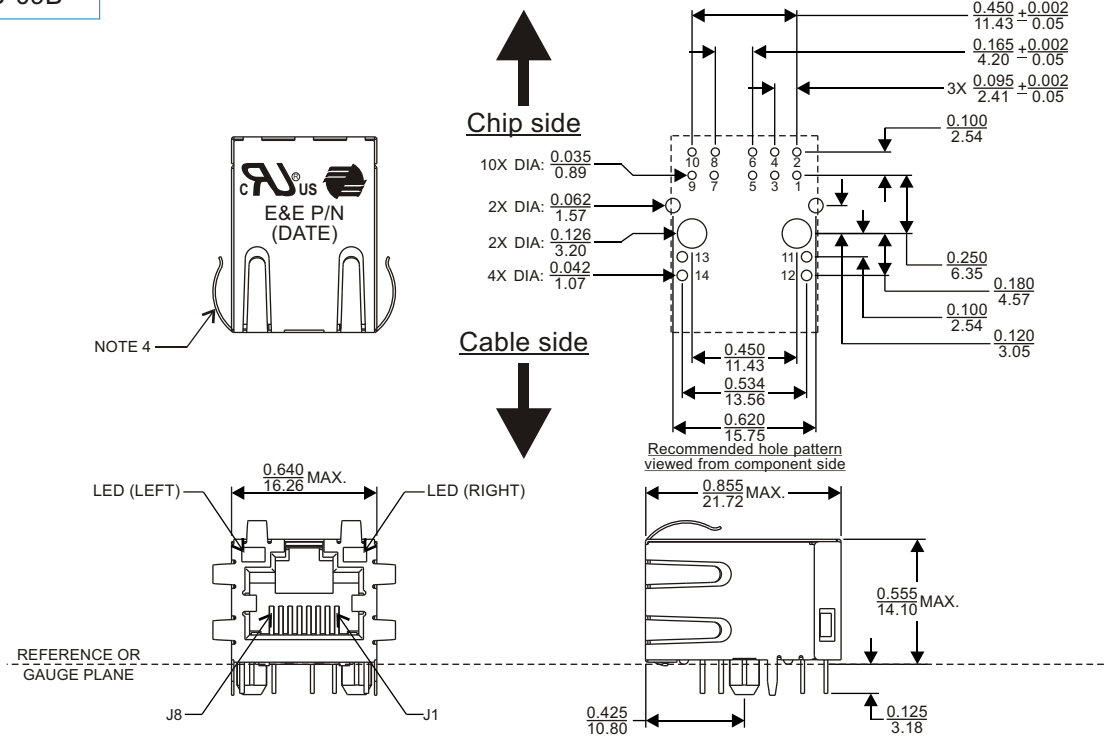
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern
(With PoE Feature)

MECHANICAL DIMENSIONS

MJ11U-09A



MJ11U-09B



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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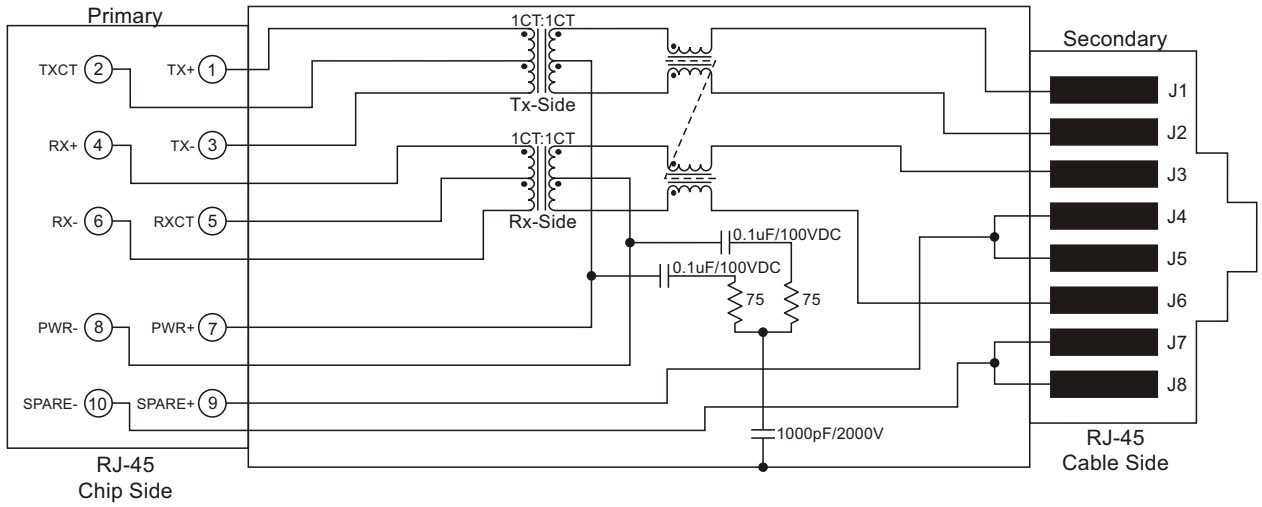
10/100 Base-T Applications
Single Port, Through Hole, Tab Up
Straight-row Output Pins Pattern
(With PoE Feature)

SCHEMATICS

VB110



LEDs COLOR AND POLARITY

MJ11U-09B	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 13	PIN 14		PIN 11	PIN 12
LED (RIGHT) 11 12 LED (LEFT) 13 14	GREEN	+	—	YELLOW	+	—

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
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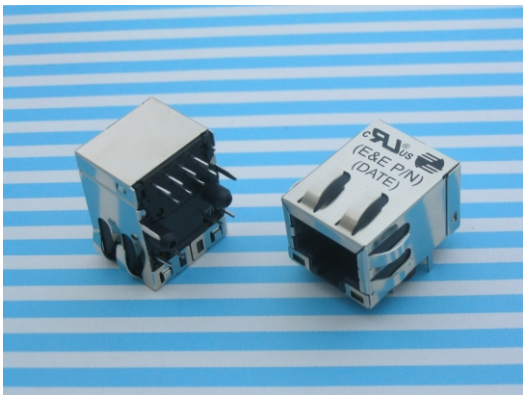
E & E Magnetic Products Limited

10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (4 cores Designs)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- Symmetrical TX and RX channels which is suitable for Auto MDI/MDIX application
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11D2GYA0-H30Y	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01A	H30Y
MJR11D2GYA0-H33D	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01A	H33D
MJR11D2GYA0-H34F	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01A	H34F
MJR11D2GYA0-K30Y[6]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01A	K30Y
MJR11D2GYA0-K33D[6]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01A	K33D
MJR11D2GYA1-H30Y	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01B	H30Y
MJR11D2GYA1-H33D	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01B	H33D
MJR11D2GYA1-H34F	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01B	H34F
MJR11D2GYA1-K30Y[6]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01B	K30Y
MJR11D2GYA1-K33D[6]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11D-01B	K33D
MJR11D2NNA0-H30Y	1CT:1CT	1CT:1CT	TC	TC	—	MJ11D-01C	H30Y
MJR11D2NNA0-H33D	1CT:1CT	1CT:1CT	TC	TC	—	MJ11D-01C	H33D
MJR11D2NNA0-H34F	1CT:1CT	1CT:1CT	TC	TC	—	MJ11D-01C	H34F
MJR11D2NNA0-K30Y[6]	1CT:1CT	1CT:1CT	TC	TC	—	MJ11D-01C	K30Y
MJR11D2NNA0-K33D[6]	1CT:1CT	1CT:1CT	TC	TC	—	MJ11D-01C	K33D

Notes:

1. Ordering Information: MJR11D2GYA0-abbbc/MJR11D2GYA1-abbbc/MJR11D2NNA0-abbbc.
   MJR11D2GYA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   MJR11D2GYA1 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   MJR11D2NNA0 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   abbb = Schematic code(H30Y/H33D/H34F/K30Y/K33D).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ;
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; "— " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Panel tabs are optional.
6. Operating temperature: -40°C to +85°C.

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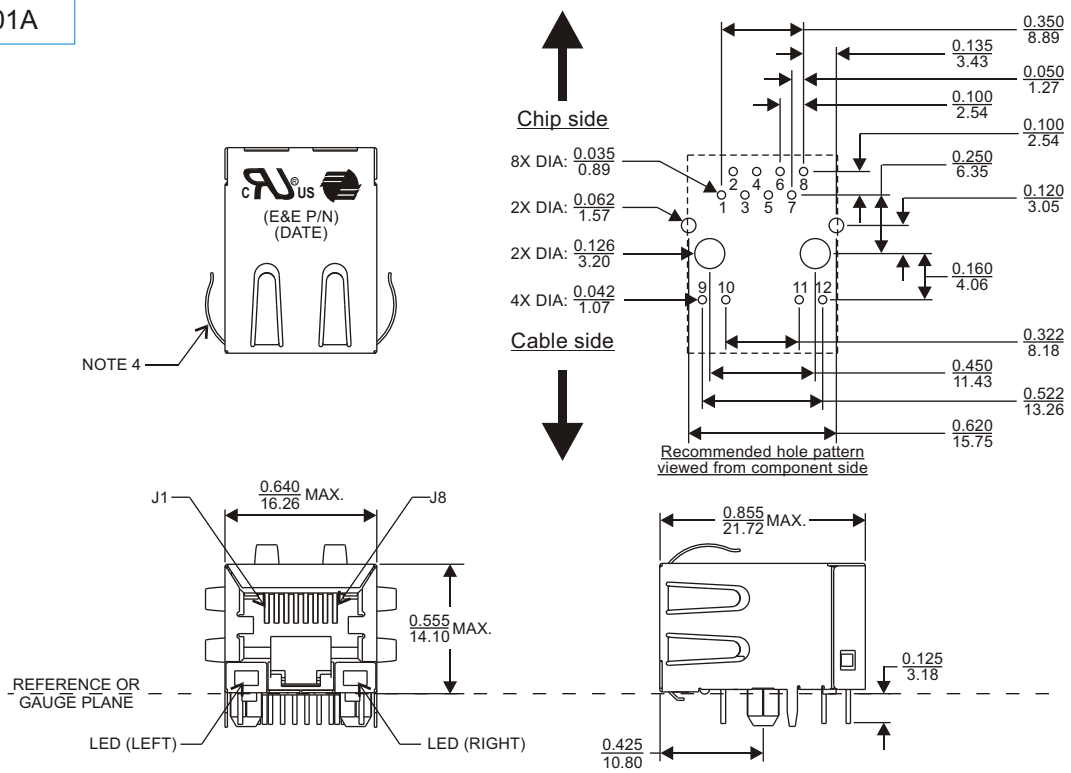
Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (4 cores Designs)

MECHANICAL DIMENSIONS

MJ11D-01A



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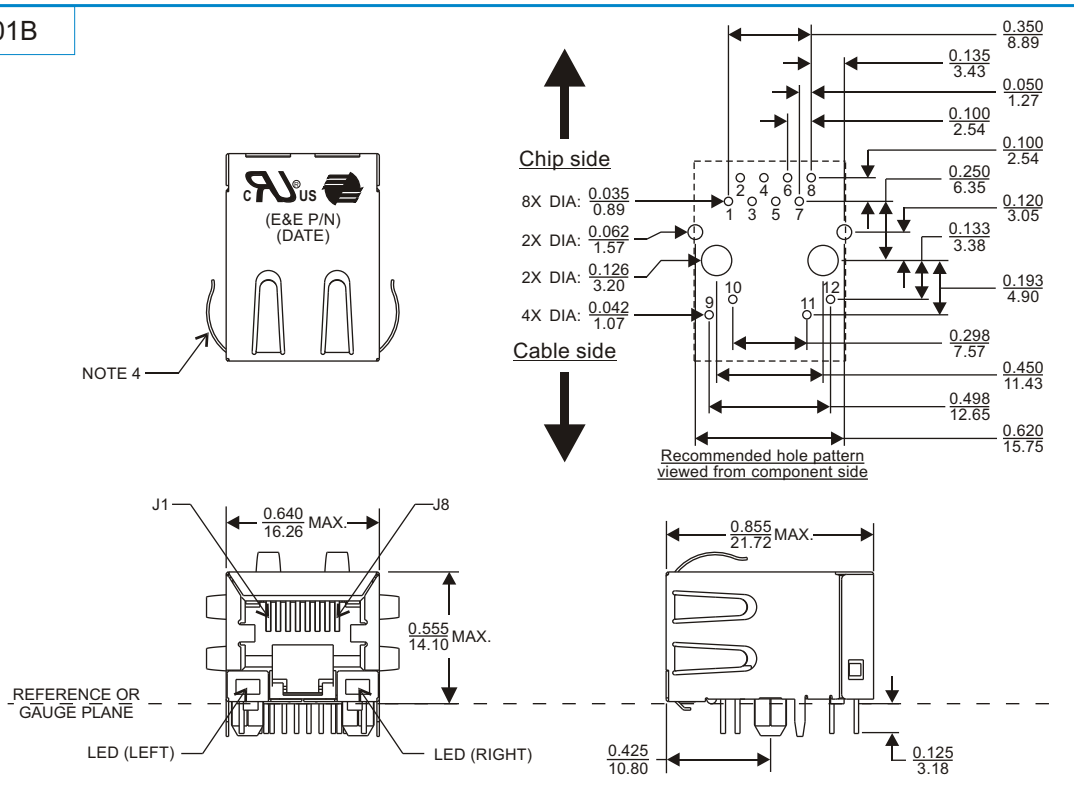

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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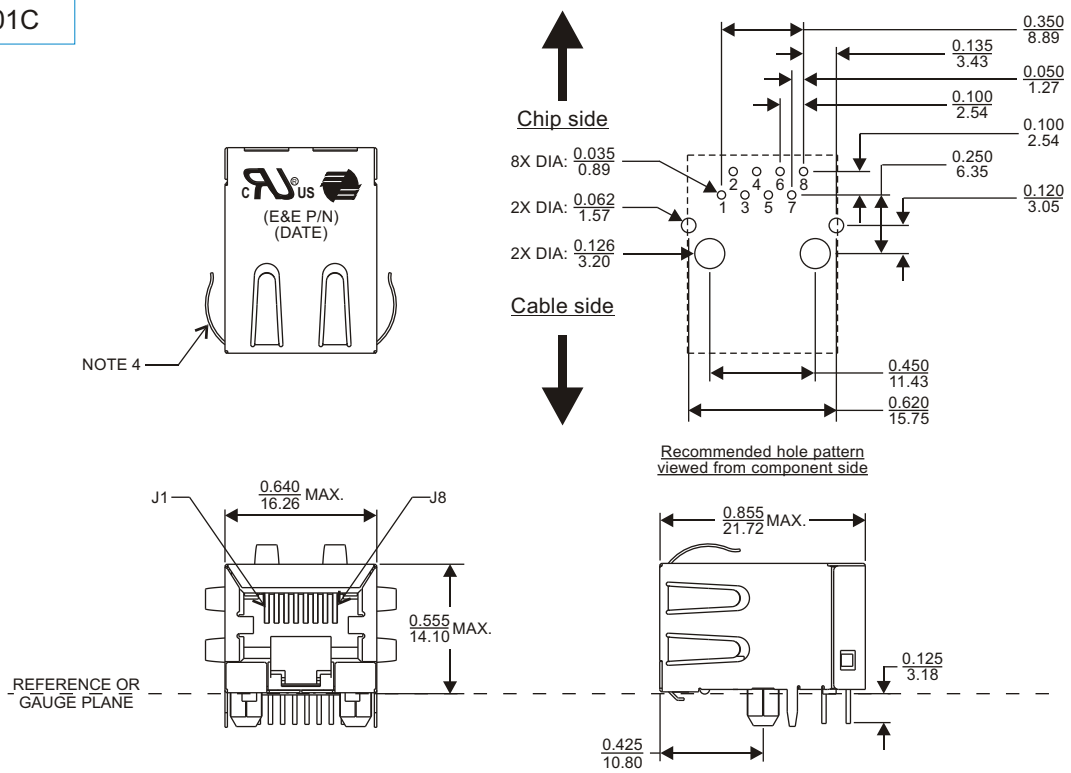
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (4 cores Designs)

MECHANICAL DIMENSIONS

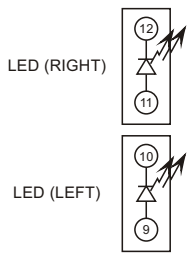
MJ11D-01C

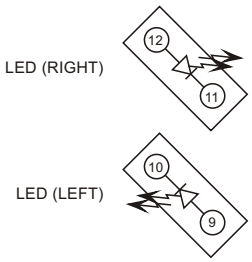


All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm\frac{0.010}{0.25}$.

LEDS COLOR AND POLARITY

MJ11D-01A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 9	PIN 10		PIN 11	PIN 12
	GREEN	+	−	YELLOW	+	−

MJ11D-01B	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 9	PIN 10		PIN 12	PIN 11
	GREEN	+	−	YELLOW	+	−

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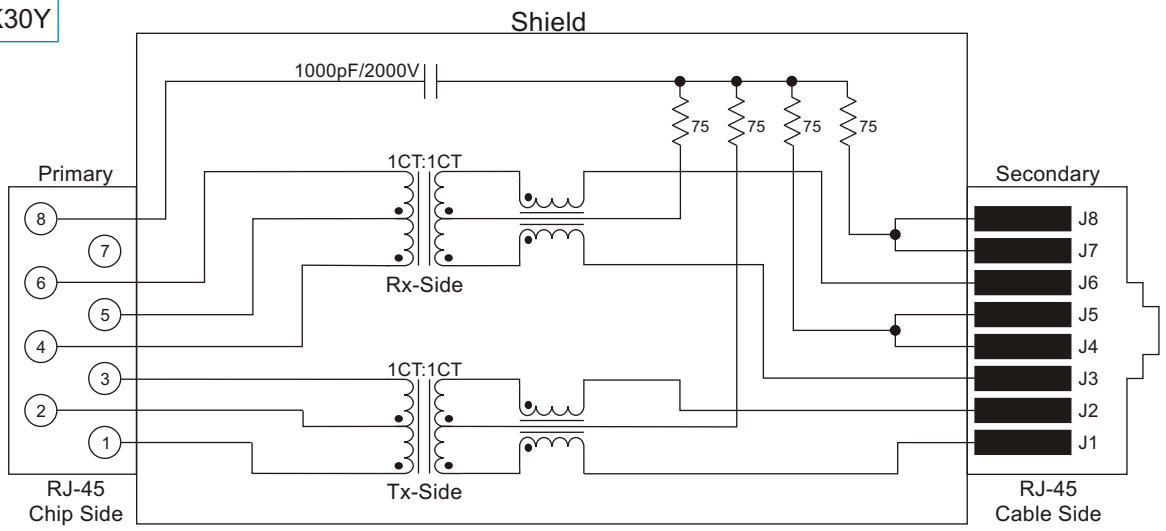
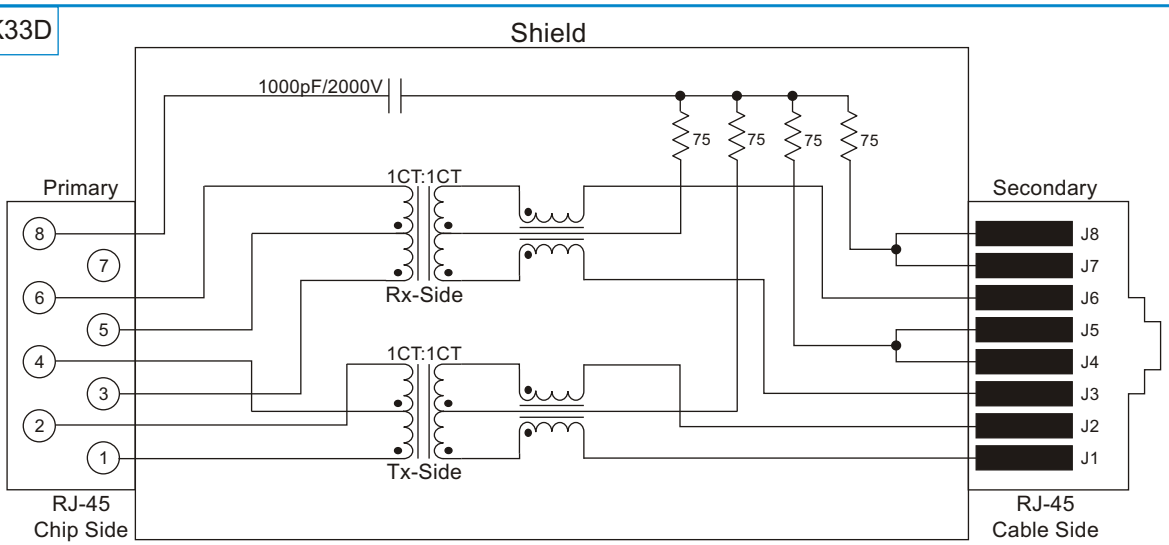
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (4 cores Designs)

SCHEMATICS

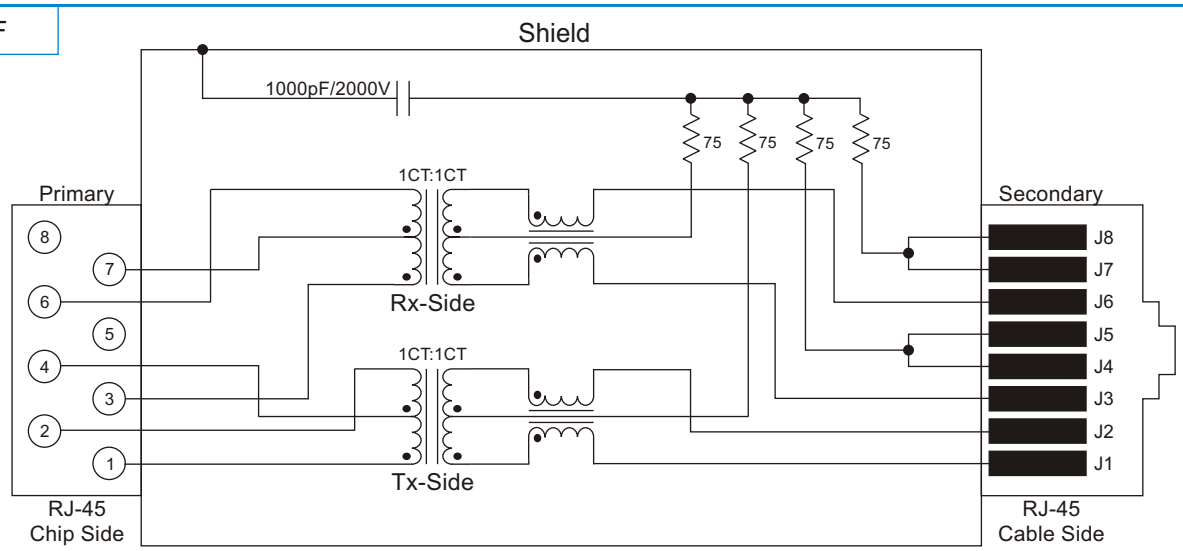
H30Y / K30Y



H33D / K33D



H34F



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10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (4 cores Designs)

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA			
Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

MATERIALS	
Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

Notes:

7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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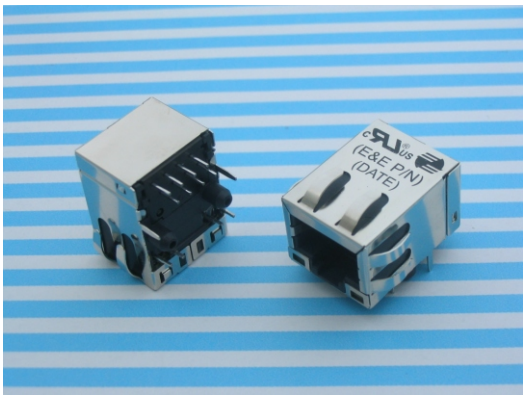
Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (5 cores Designs)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (± 3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11D2GYA0-H301	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ11D-01A	H301
MJR11D2GYA0-H34Y	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ11D-01A	H34Y
MJR11D2GYA1-H301	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ11D-01B	H301
MJR11D2GYA1-H34Y	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ11D-01B	H34Y
MJR11D2NNA0-H301	1CT:1	1CT:1CT	TCA	CT	—	MJ11D-01C	H301
MJR11D2NNA0-H34Y	1CT:1	1CT:1CT	TCA	CT	—	MJ11D-01C	H34Y

Notes:

1. Ordering Information: MJR11D2GYA0-abbbc/MJR11D2GYA1-abbbc/MJR11D2NNA0-abbbc.
   - MJR11D2GYA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11D2GYA1 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11D2NNA0 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(H301/H34Y).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; " — "= None. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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Elec & Eltek依利安達
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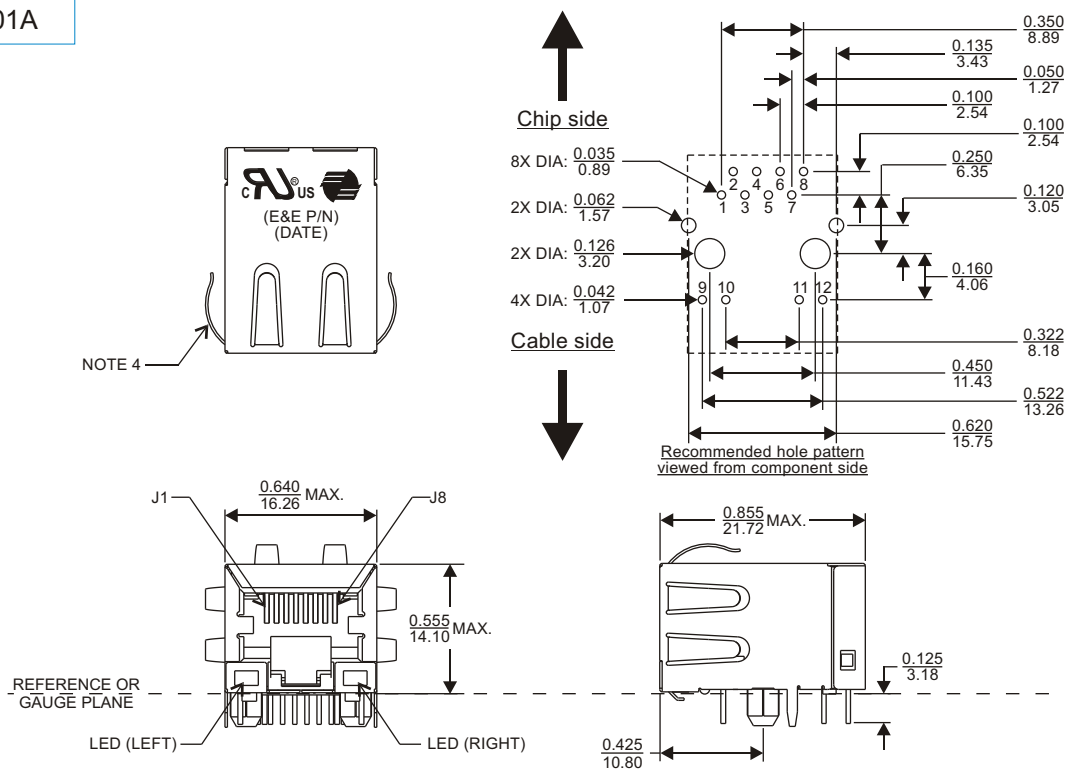
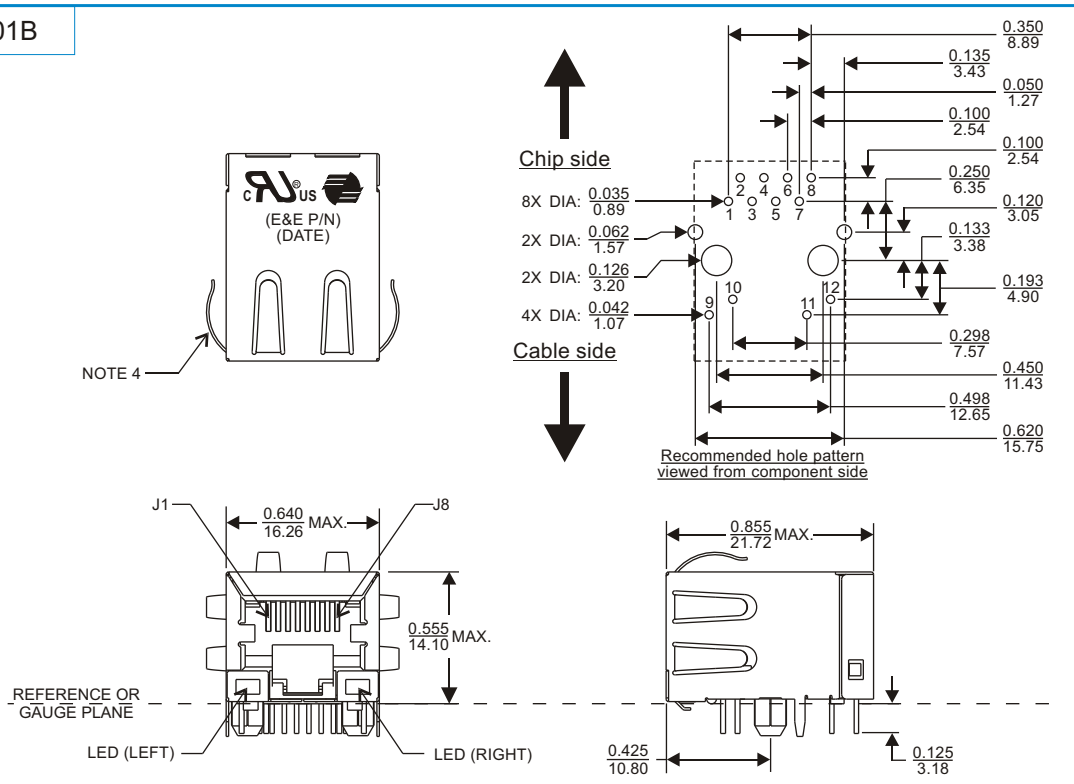
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (5 cores Designs)

MECHANICAL DIMENSIONS

MJ11D-01A



MJ11D-01B



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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Elec & Eltek依利安達
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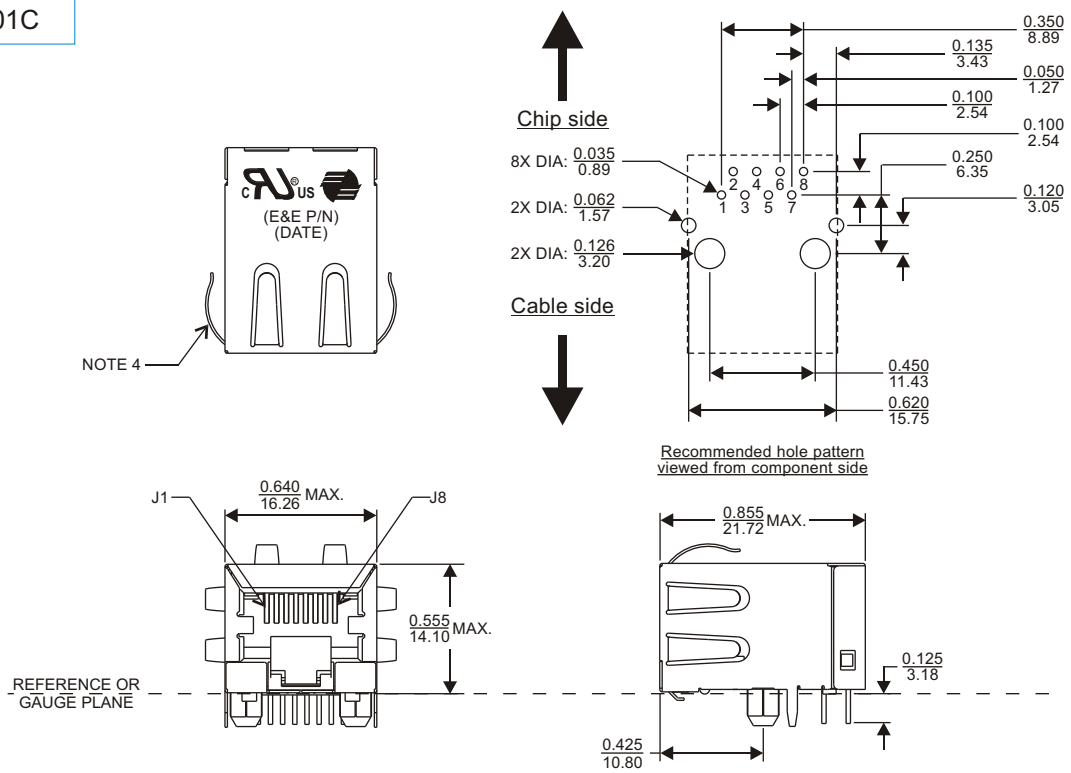
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (5 cores Designs)

MECHANICAL DIMENSIONS

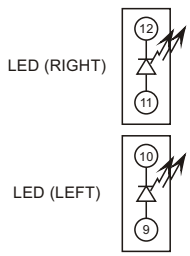
MJ11D-01C

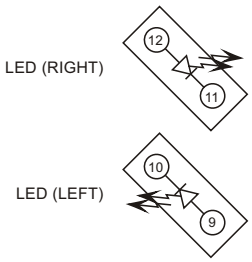


All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm\frac{0.010}{0.25}$.

LEDs COLOR AND POLARITY

MJ11D-01A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 9	PIN 10		PIN 11	PIN 12
	GREEN	+	−	YELLOW	+	−

MJ11D-01B	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 9	PIN 10		PIN 12	PIN 11
	GREEN	+	−	YELLOW	+	−

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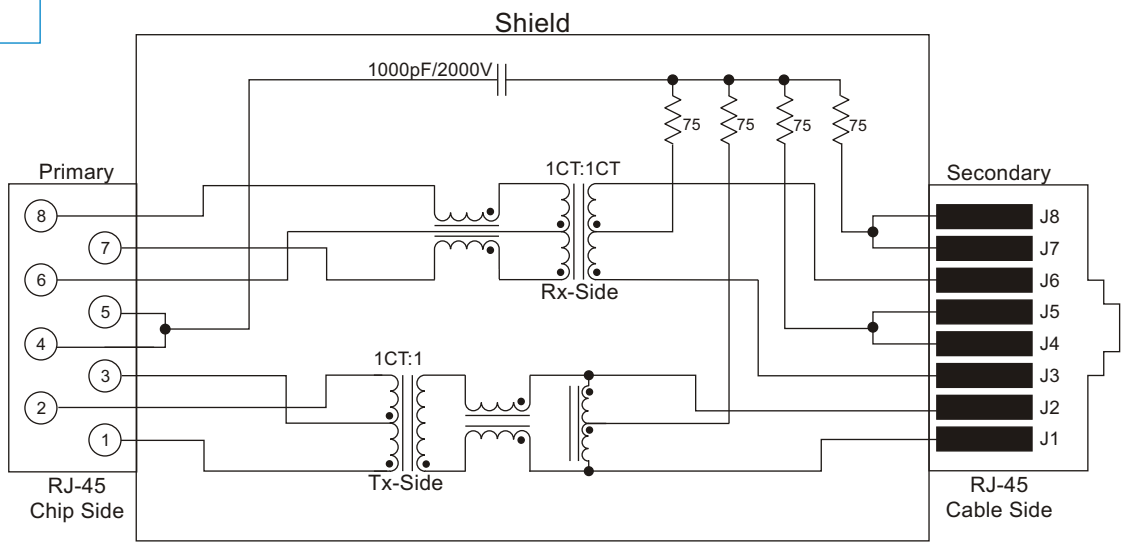
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Zigzag Output Pins Pattern (5 cores Designs)

LED Specification @25°C, Forward Current = 20mA

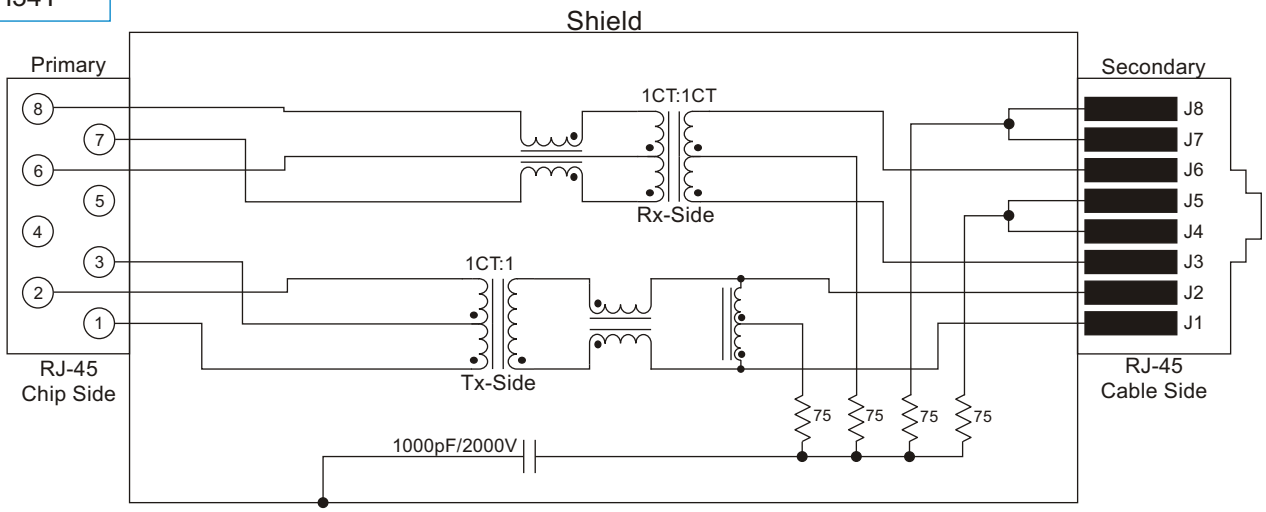
Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

Schematics

H301



H34Y



For more information, please contact

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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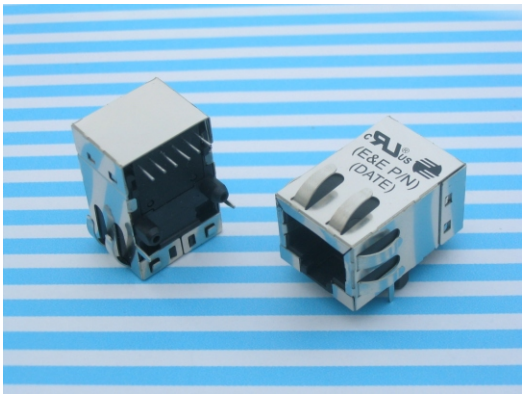
E & E Magnetic Products Limited

10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- Symmetrical TX and RX channels which is suitable for Auto MDI/MDIX application
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11D2NNA4-H34K	1CT:1CT	1CT:1CT	TC	TC	—	MJ11D-02A	H34K
MJR11D2NNA4-K34K[7]	1CT:1CT	1CT:1CT	TC	TC	—	MJ11D-02A	K34K

Notes:

1. Ordering Information: MJR11D2NNA4-abbbc.
   MJR11D2NNA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   abbb = Schematic code(H34K).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ;
4. LEDs (Left / Right) : "— " = None.
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
7. Operating temperature: -40°C to +85°C.

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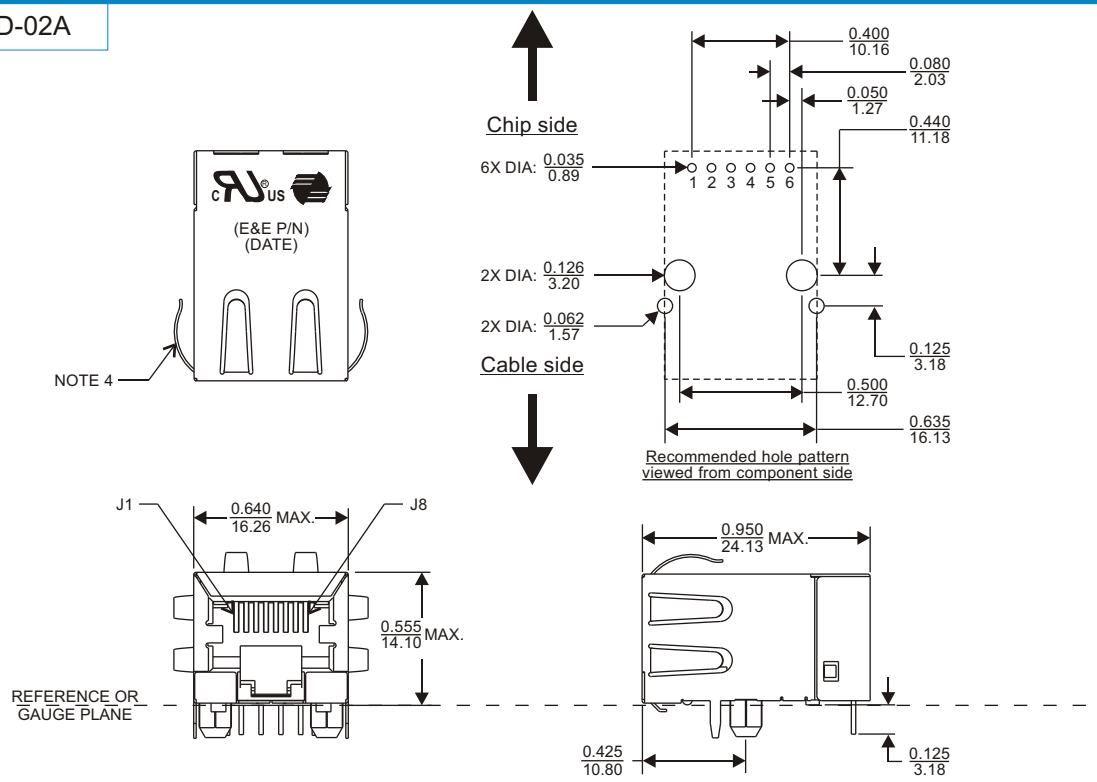
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern

MECHANICAL DIMENSIONS

MJ11D-02A



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm\frac{0.010}{0.25}$.

MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[5]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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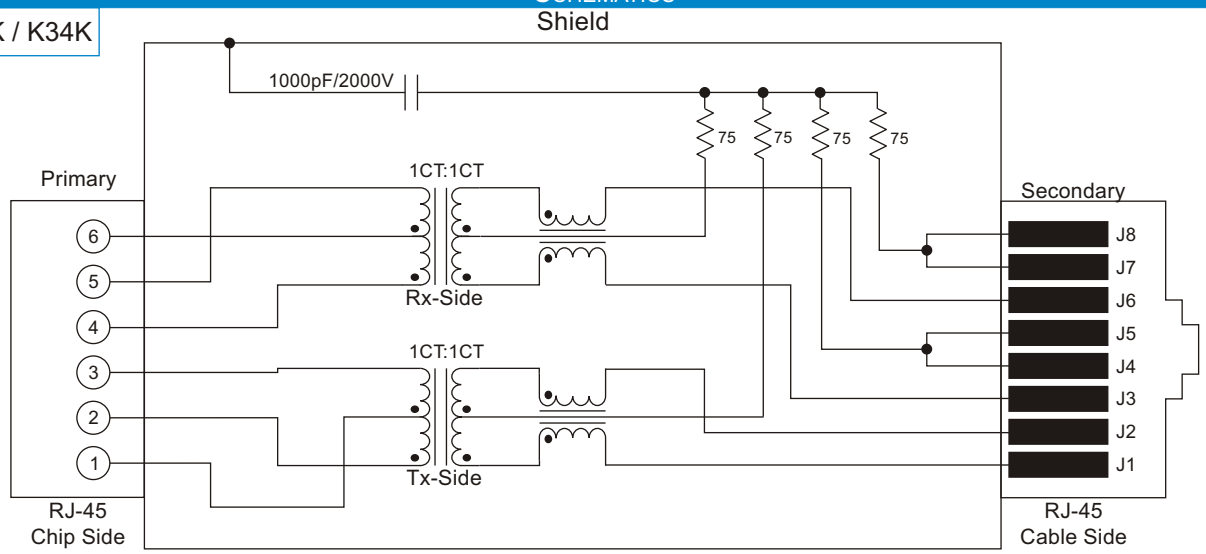
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern

SCHEMATICS

H34K / K34K



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern
(With PoE Feature)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3af standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- 350mA balanced DC line current capability
- Designed for Power over Ethernet (PoE) enabled switch / router / hub applications
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.2	16.0	14.0	13.0	12.0	42.0	37.0	33.0	33.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11D2GYA9-VB121	1CT:1CT	1CT:1CT	TS	TS	G / Y	MJ11D-06A	VB121
MJR11D2NNA9-VB121	1CT:1CT	1CT:1CT	TS	TS	—	MJ11D-06B	VB121

Notes:

1. Ordering Information: MJR11D2GYA9-aabbbc/MJR11D2NNA9-aabbbc.
   MJR11D2GYA9 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   MJR11D2NNA9 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   aabbb = Schematic code(VB121).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = isolation transformer ; "S" = Shared Common-mode choke
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; " — "= None. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
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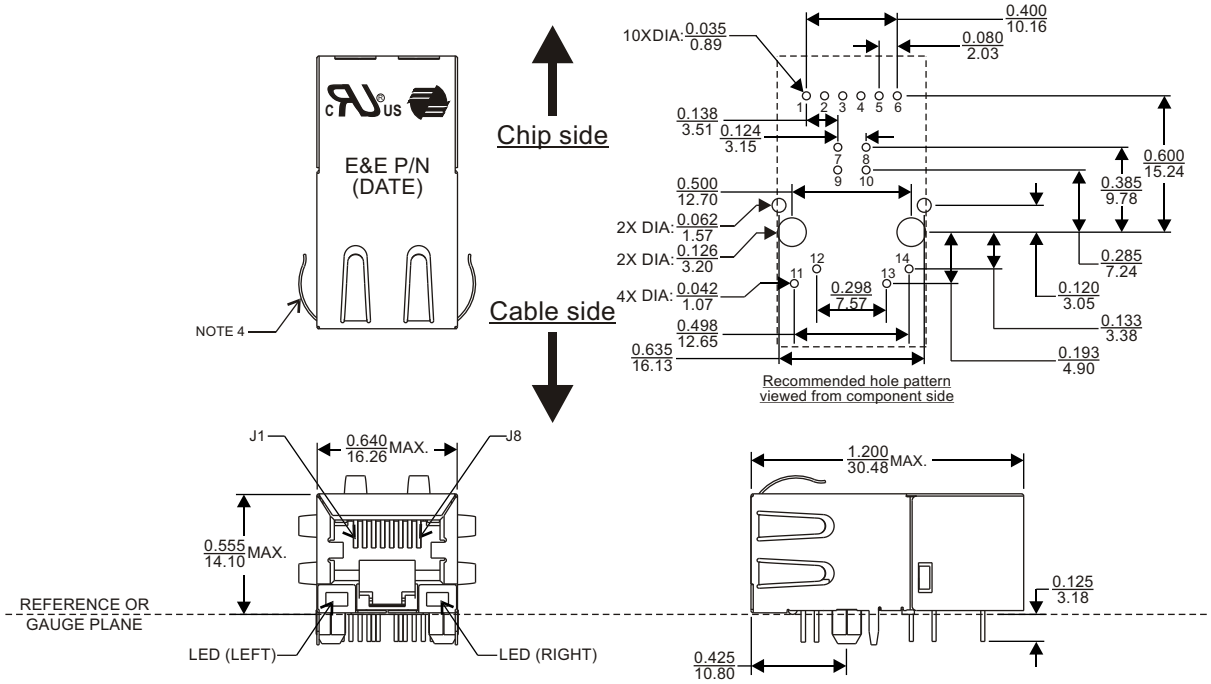
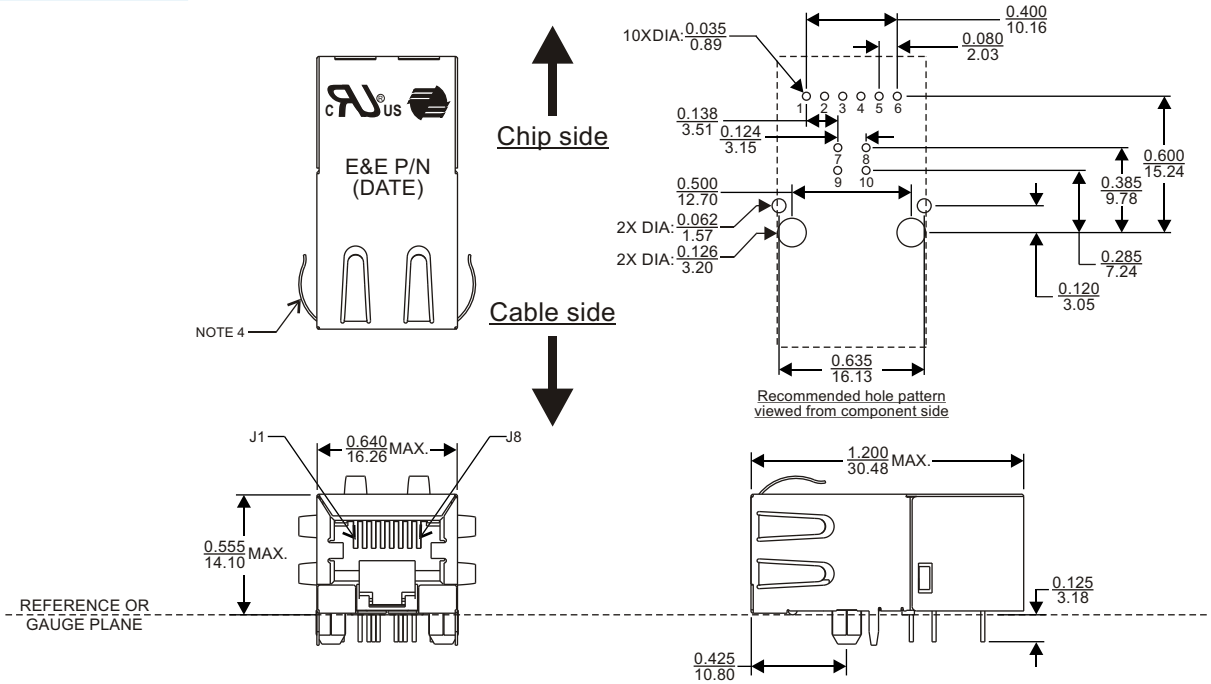
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern
(With PoE Feature)

MECHANICAL DIMENSIONS

MJ11D-06A



MJ11D-06B



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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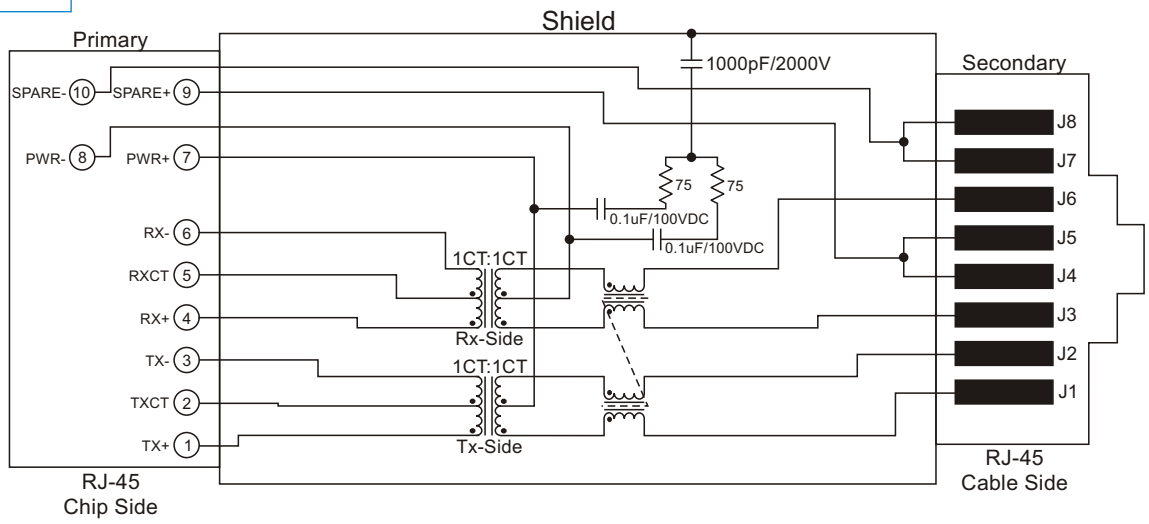
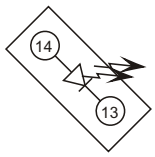
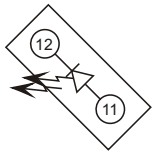
10/100 Base-T Applications
Single Port, Through Hole, Tab Down
Straight-row Output Pins Pattern
(With PoE Feature)

SCHEMATICS

VB110



LEDs COLOR AND POLARITY

MJ11D-06A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 13	PIN 14		PIN 11	PIN 12
LED (RIGHT)  LED (LEFT) 	GREEN	—	+	YELLOW	+	—

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Single Port, SMD, Tab Down

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11S2NNA4-H34L	1CT:1CT	1CT:1CT	TC	TC	—	MJ11S-01A	H34L[5]
MJR11S2NNA4-H359	1CT:1CT	1CT:1CT	CT	CT	—	MJ11S-01A	H359[5]
MJR11S2NNA4-H35V	1CT:1	1CT:1CT	TCA	CT	—	MJ11S-01A	H35V

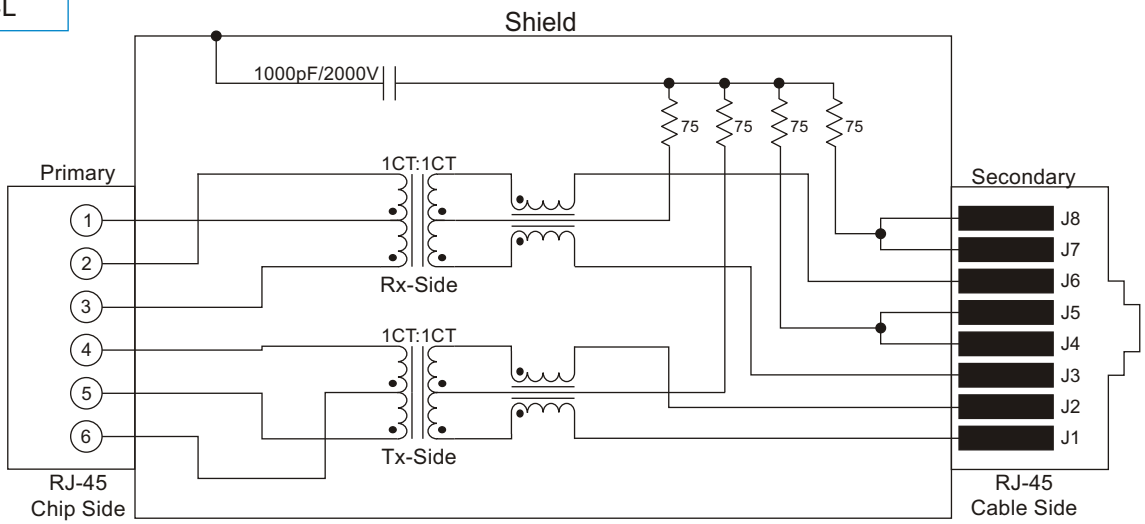
Notes:

1. Ordering Information: MJR11S2NNA4-abbbc.
   MJR11S2NNA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   abbb = Schematic code(H34L/H359/H35V).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "—" = None.
5. Schematic H34L and H359 are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

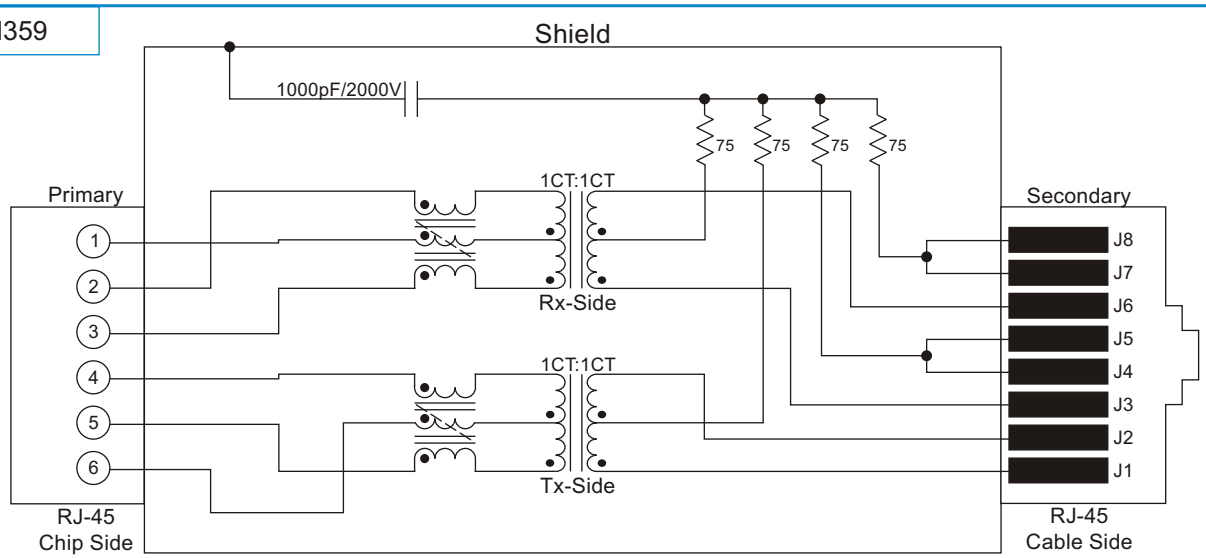
1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

SCHEMATICS

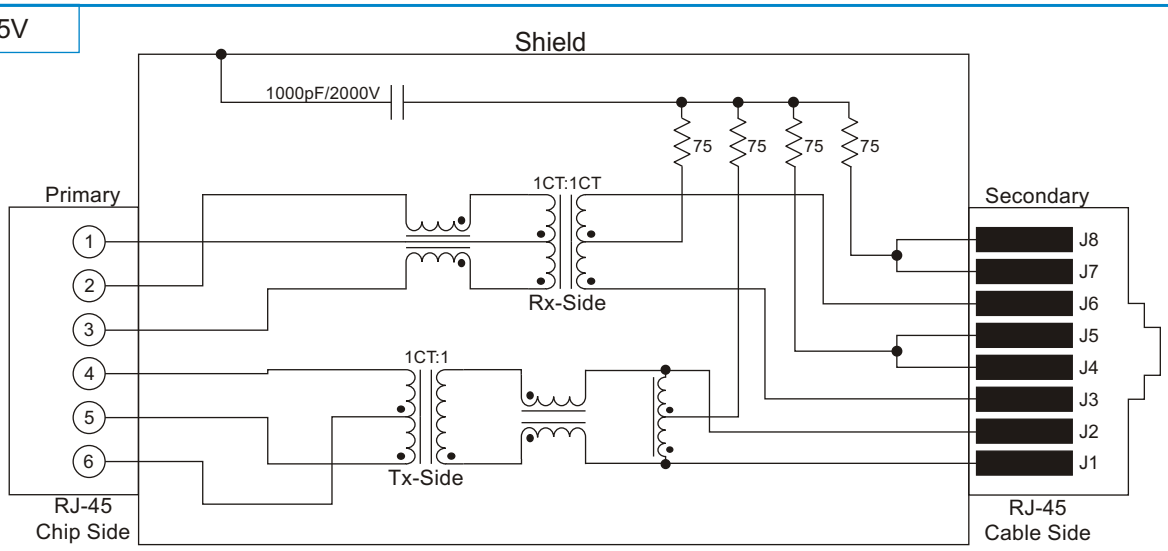
H34L



H359

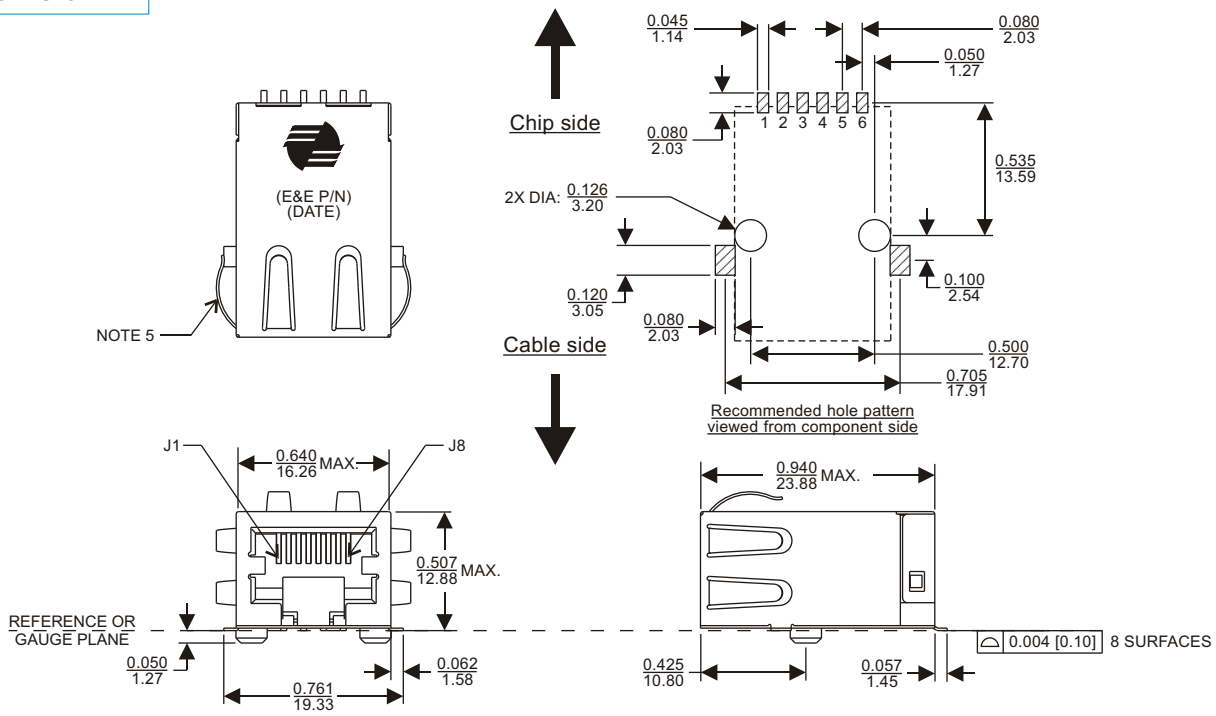


H35V



MECHANICAL DIMENSIONS

MJ11S-01A



All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm\frac{0.010}{0.25}$.

MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

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Website: http://www.eleceltek.com / www.eemagnetic.com

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Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications Single Port, Through Hole Vertical Type

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

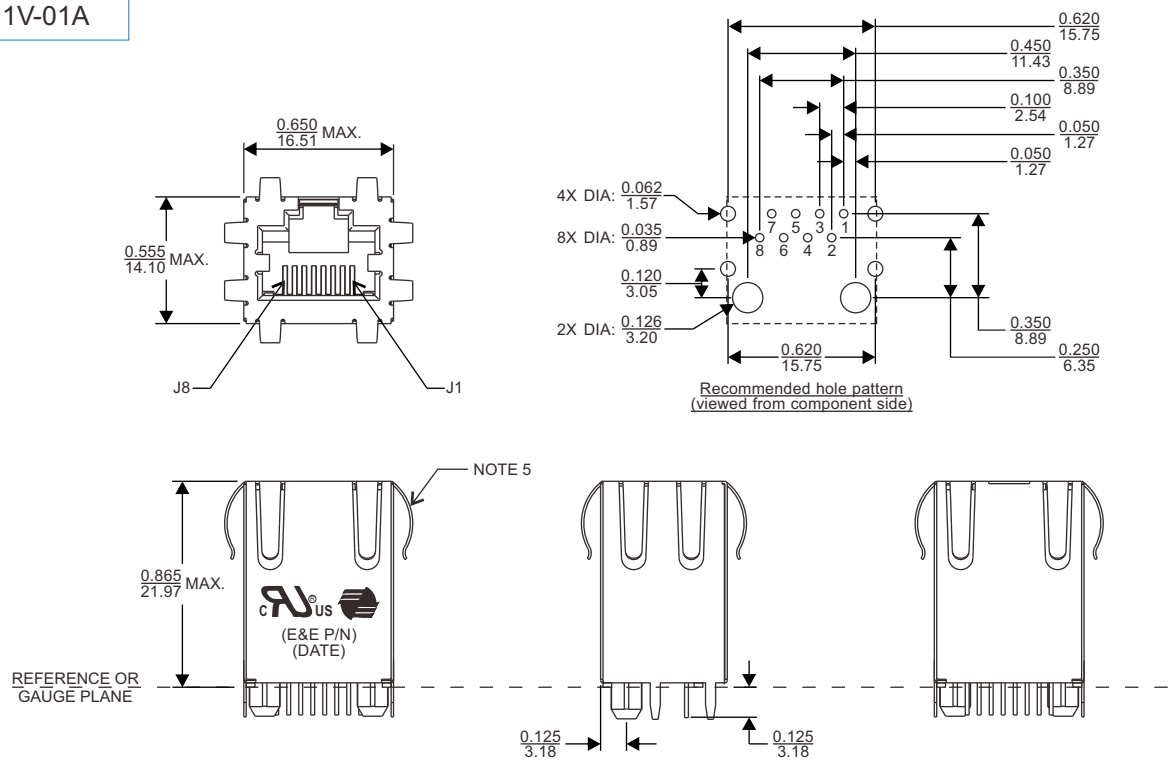
Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR11V2GYA0-H301	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ11V-01B	H301
MJR11V2GYA0-H30Y	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11V-01B	H30Y[5]
MJR11V2GYA0-K30Y[8]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ11V-01B	K30Y[5]
MJR11V2NNA0-H301	1CT:1	1CT:1CT	TCA	CT	—	MJ11V-01A	H301
MJR11V2NNA0-H30Y	1CT:1CT	1CT:1CT	TC	TC	—	MJ11V-01A	H30Y[5]
MJR11V2NNA0-K30Y[8]	1CT:1CT	1CT:1CT	TC	TC	—	MJ11V-01A	K30Y[5]

Notes:

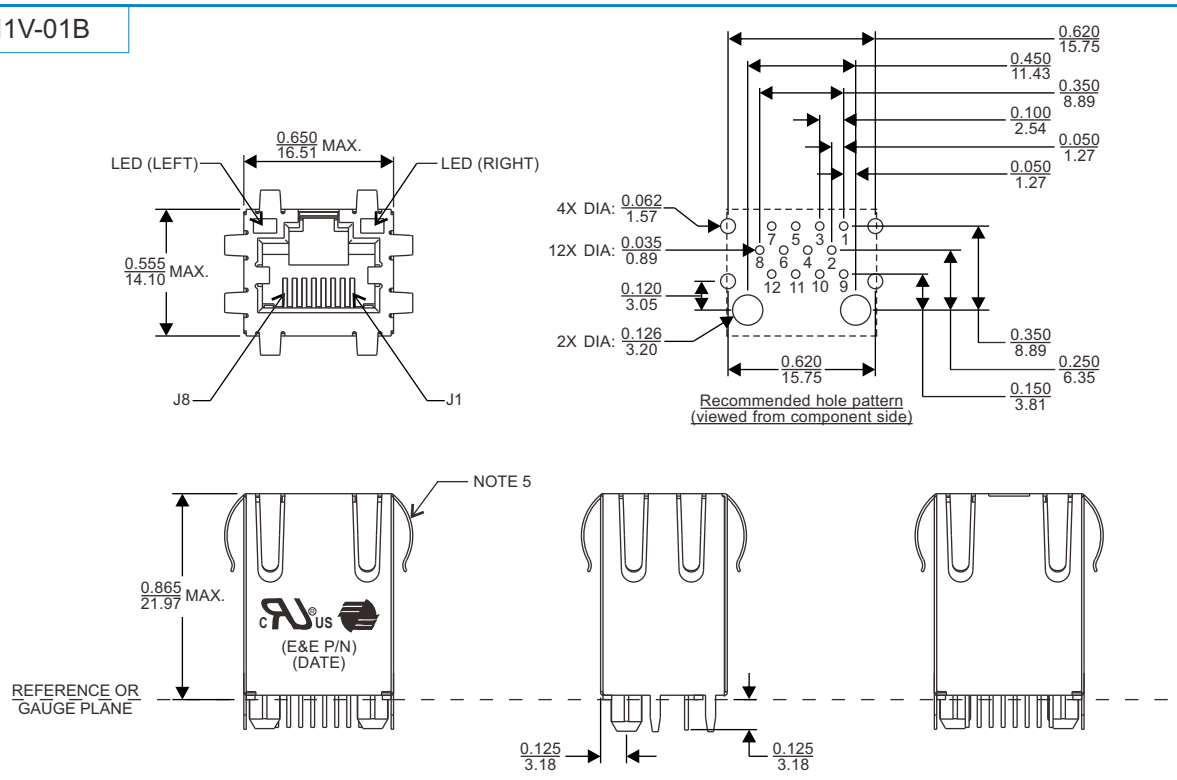
1. Ordering Information: MJR11V2GYA0-abbbc/MJR11V2NNA0-abbbc.
   - MJR11V2GYA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR11V2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(H301/H30Y/K30Y).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; "—" = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Schematic H30Y and K30Y are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
8. Operating temperature: -40°C to +85°C.

MECHANICAL DIMENSIONS

MJ11V-01A



MJ11V-01B

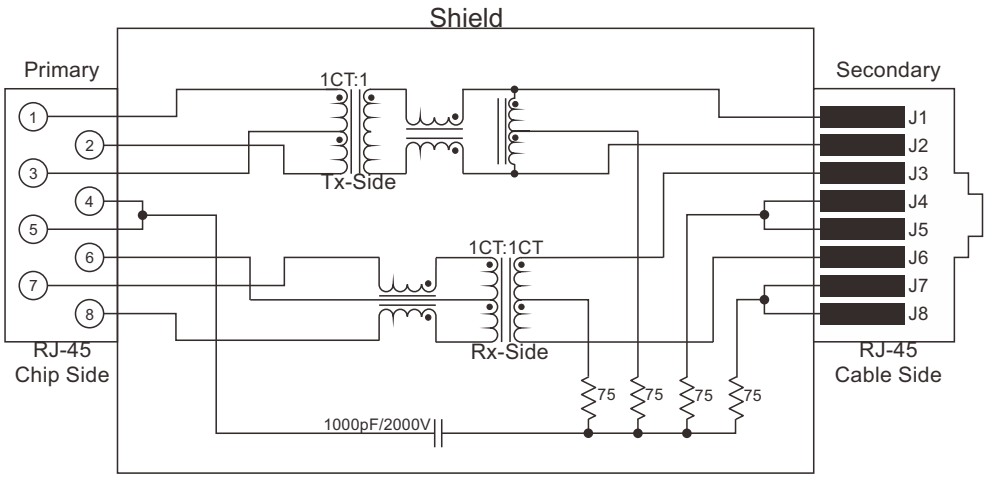


All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

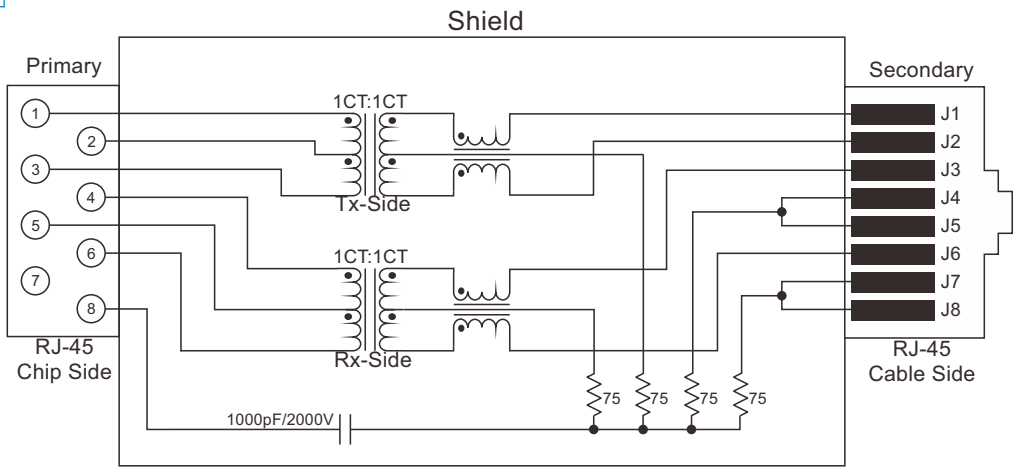
Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

SCHEMATICS

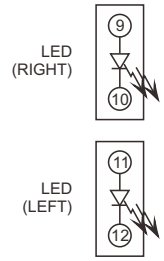
H301



H30Y / K30Y



LEDs Color And Polarity

MJ11V-01B	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 9	PIN 10
	GREEN	+	—	YELLOW	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

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Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- Gang 1x4 design for Hub and Switch Applications
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR14U2GYA5-H10G	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ14U-01A	H10G[5]
MJR14U2GYA5-H301	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ14U-01A	H301
MJR14U2GYA5-H30Y	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ14U-01A	H30Y[5]
MJR14U2GYA5-K30Y[8]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ14U-01A	K30Y[5]
MJR14U2NNA0-H10G	1CT:1CT	1CT:1CT	TC	TC	—	MJ14U-01B	H10G[5]
MJR14U2NNA0-H301	1CT:1	1CT:1CT	TCA	CT	—	MJ14U-01B	H301
MJR14U2NNA0-H30Y	1CT:1CT	1CT:1CT	TC	TC	—	MJ14U-01B	H30Y[5]
MJR14U2NNA0-K30Y[8]	1CT:1CT	1CT:1CT	TC	TC	—	MJ14U-01B	K30Y[5]

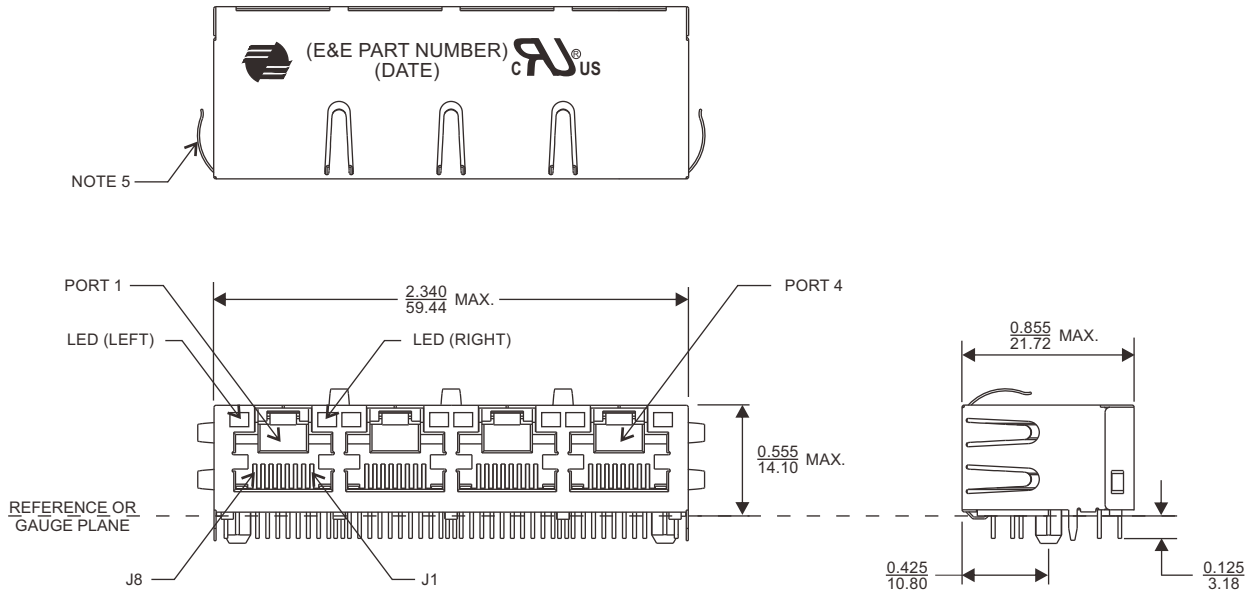
Notes:

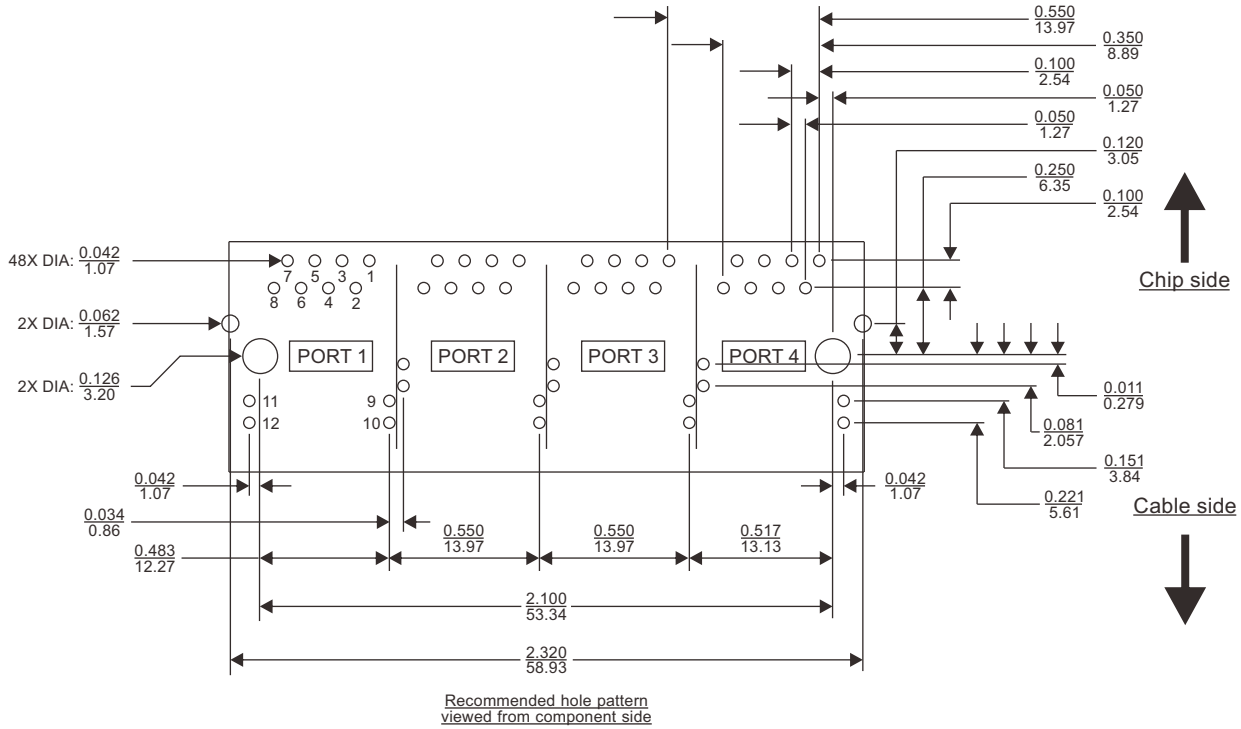
1. Ordering Information: MJR14U2GYA5-abbbc/MJR14U2NNA0-abbbc.
   - MJR14U2GYA5 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR14U2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(H10G/H301/H30Y/K30Y).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; "– " = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Schematic H10G, H30Y and K30Y are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
8. Operating temperature: -40°C to +85°C.

10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14U-01A





Recommended hole pattern
viewed from component side

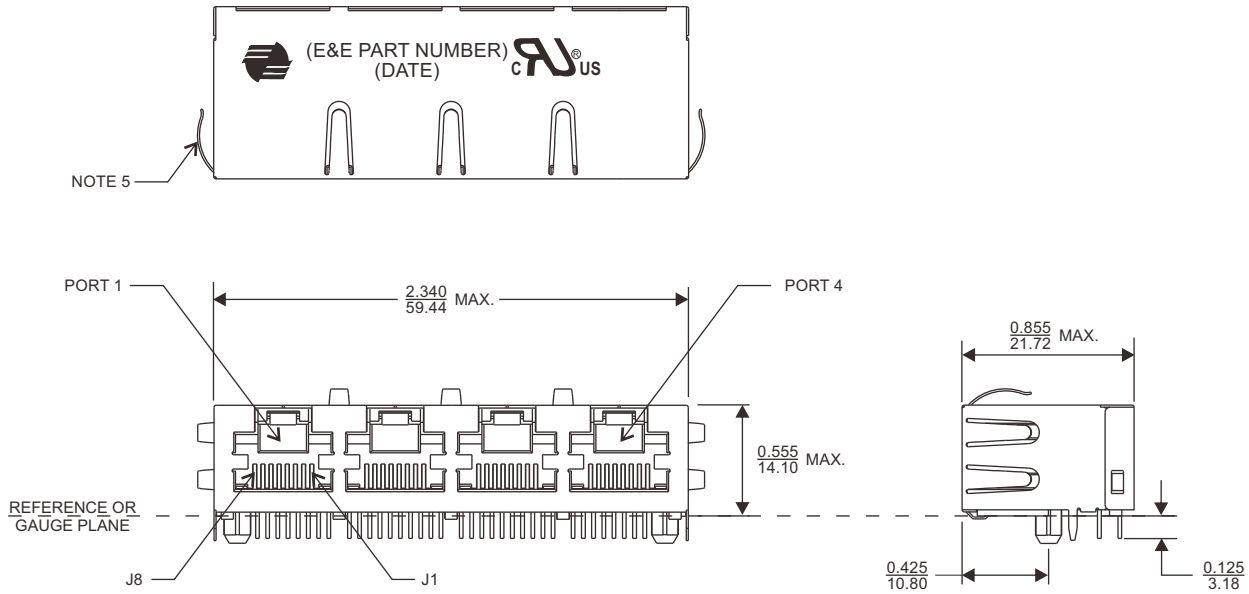
All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

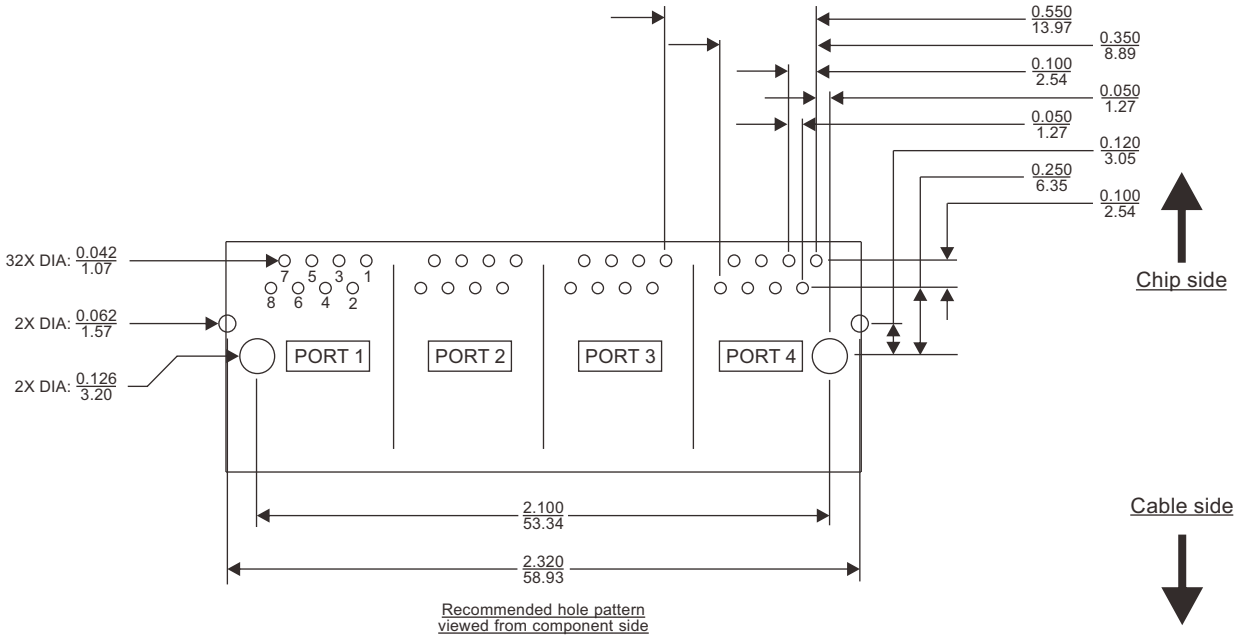
Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14U-01B





Recommended hole pattern
viewed from component side

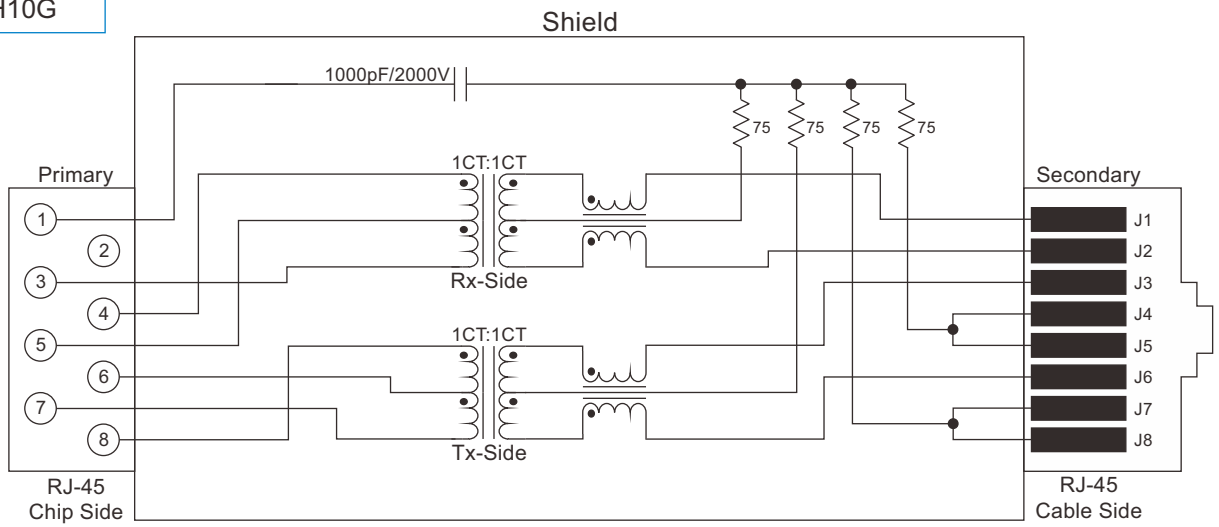
All dimensions are specified in inch / mm with higher precedence in inch.

Unless otherwise specified, all tolerances are ± 0.010 / 0.25 .

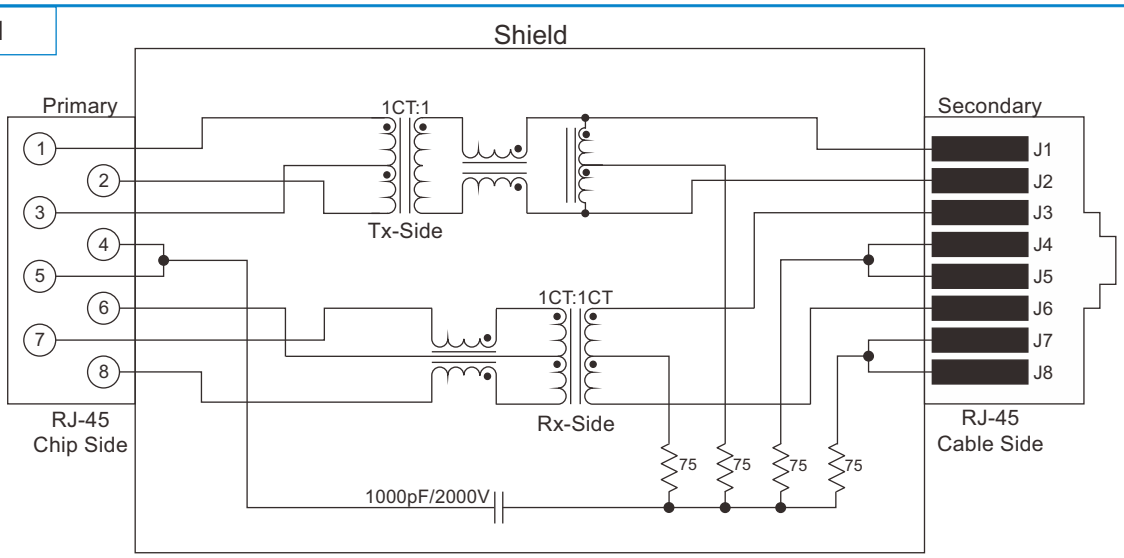
10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

SCHEMATICS

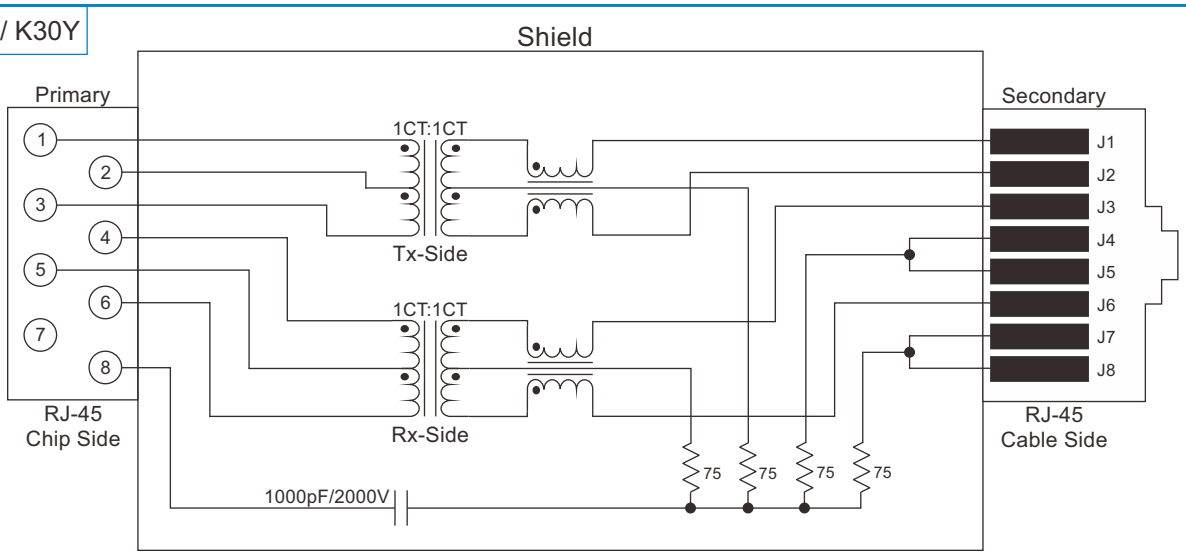
H10G



H301

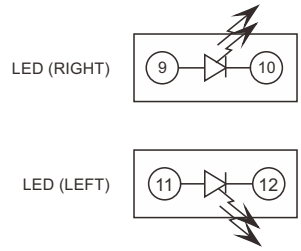


H30Y / K30Y



10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Zigzag Output Pins Pattern

LEDs Color And Polarity

MJ14U-01A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 11	PIN 12		PIN 9	PIN 10
	GREEN	+	—	YELLOW	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- Gang 1x4 design for Hub and Switch Applications
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR14U2NNA4-H34K	1CT:1CT	1CT:1CT	TC	TC	—	MJ14U-02A	H34K[5]
MJR14U2NNA4-H34U	1CT:1	1CT:1CT	TCA	CT	—	MJ14U-02A	H34U
MJR14U2NNA4-H358	1CT:1CT	1CT:1CT	CT	CT	—	MJ14U-02A	H358[5]
MJR14U2NNA4-K34K[8]	1CT:1CT	1CT:1CT	TC	TC	—	MJ14U-02A	K34K[5]

Notes:

1. Ordering Information: MJR14U2NNA4-abbbc.
   MJR14U2NNA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   abbb = Schematic code(H34K/H34U/H358/K34K).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "– " = None.
5. Schematic H34K, H358 and K34K are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
8. Operating temperature: -40°C to +85°C.

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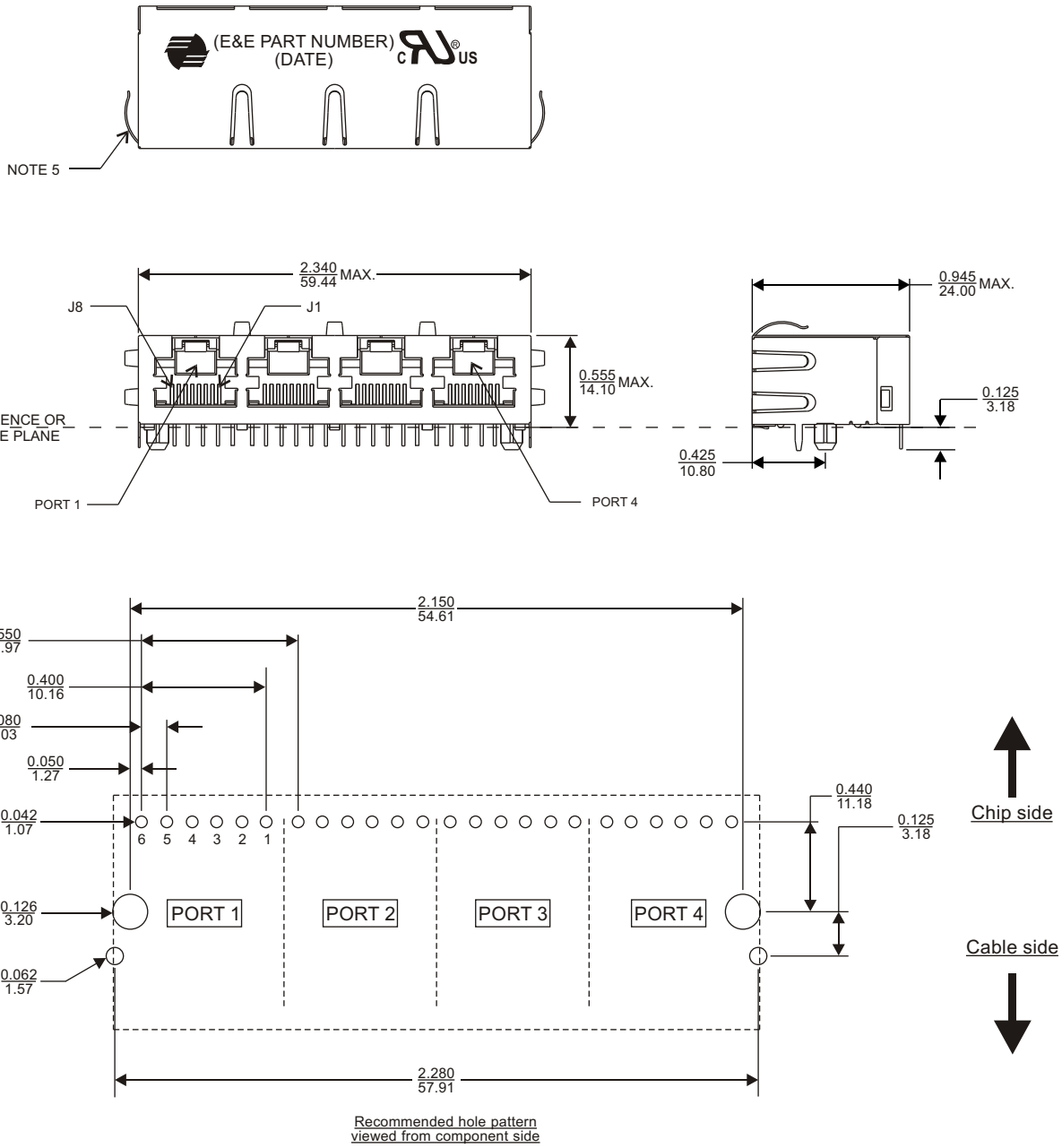
10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14U-01A



Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

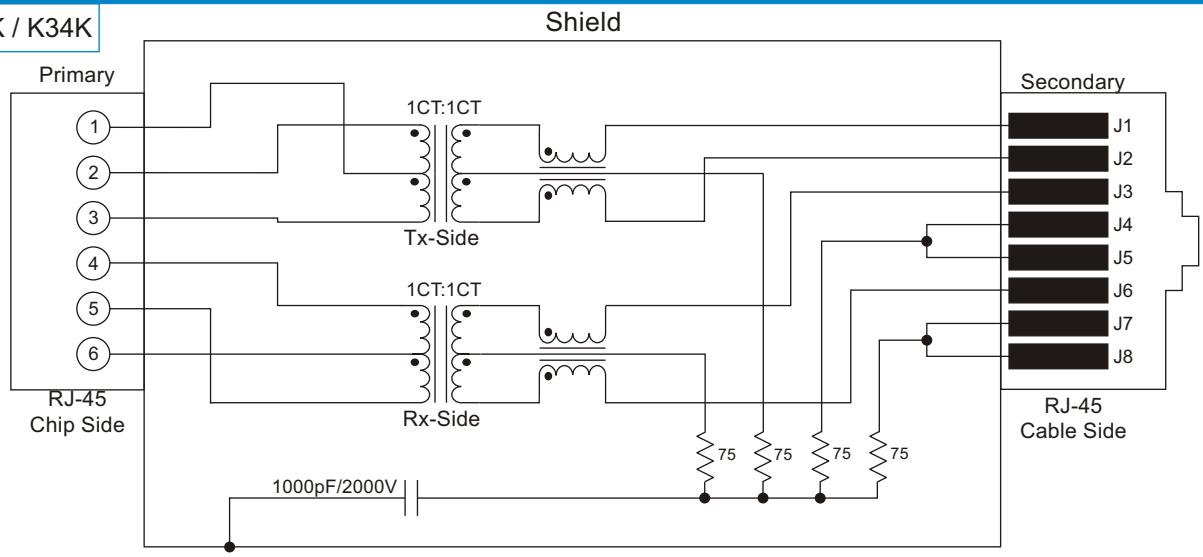
Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

Elec & Eltek依利安達
E & E Magnetic Products Limited

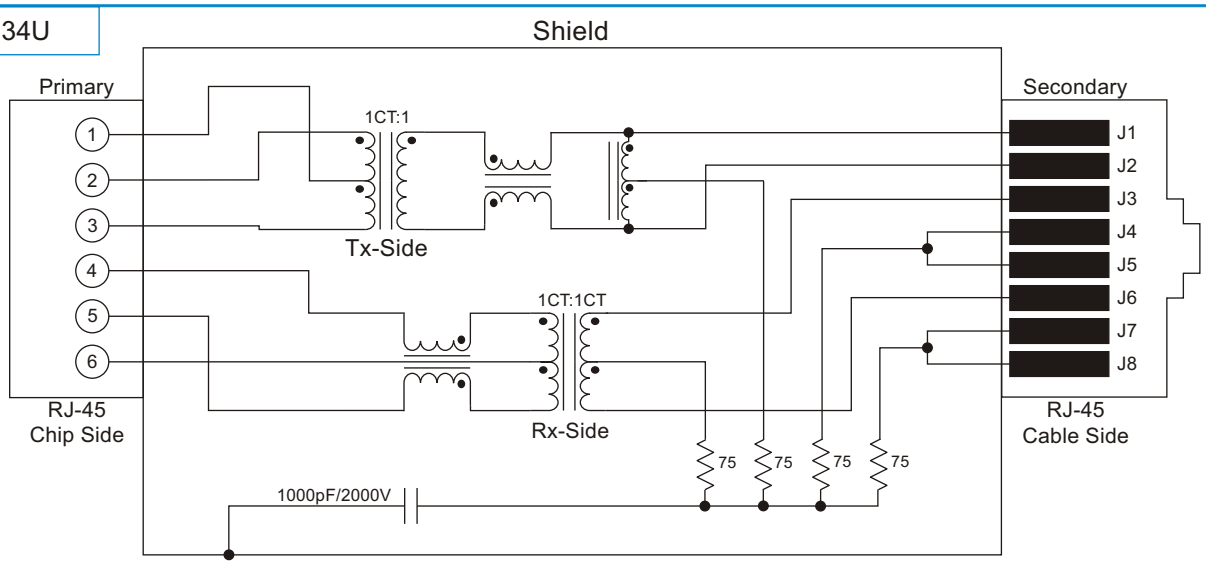
10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins Pattern

SCHEMATICS

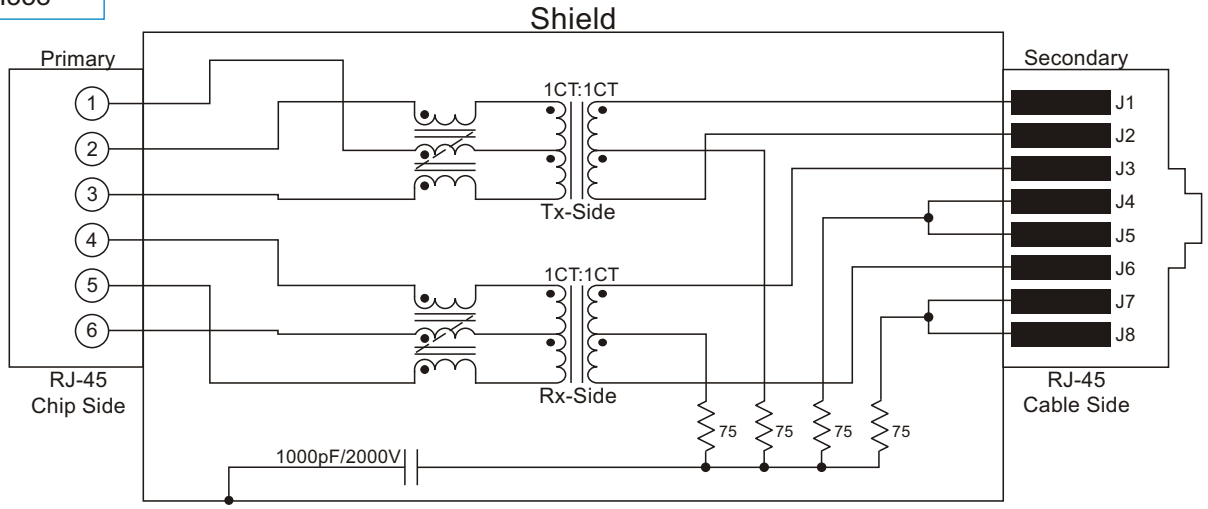
H34K / K34K



H34U



H358



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10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Up
Straight-row Output Pins Pattern

MATERIALS	
Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
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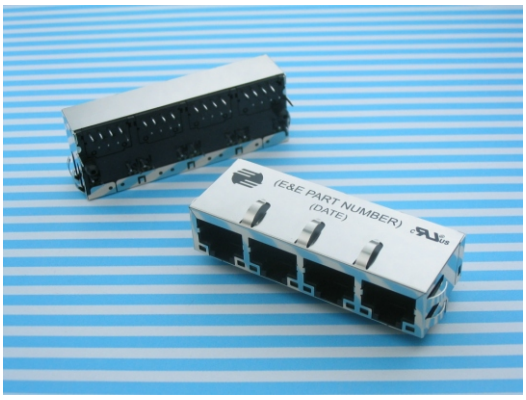
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- Gang 1x4 design for Hub and Switch Applications
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR14D2GYA1-H152	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ14D-01A	H152
MJR14D2GYA1-H301	1CT:1	1CT:1CT	TCA	CT	G / Y	MJ14D-01A	H301
MJR14D2GYA1-H33D	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ14D-01A	H33D[5]
MJR14D2GYA1-K33D[8]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MJ14D-01A	K33D[5]
MJR14D2NNA0-H152	1CT:1	1CT:1CT	TCA	CT	—	MJ14D-01C	H152
MJR14D2NNA0-H301	1CT:1	1CT:1CT	TCA	CT	—	MJ14D-01C	H301
MJR14D2NNA0-H33D	1CT:1CT	1CT:1CT	TC	TC	—	MJ14D-01C	H33D[5]
MJR14D2NNA0-K33D[8]	1CT:1CT	1CT:1CT	TC	TC	—	MJ14D-01C	K33D[5]

Notes:

1. Ordering Information: MJR14D2GYA1-abbbc/MJR14D2NNA0-abbbc.
   - MJR14D2GYA1 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR14D2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(H152/H301/H33D/K33D).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow ; "–" = None. For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Schematic H33D, K33D are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
8. Operating temperature: -40°C to +85°C.

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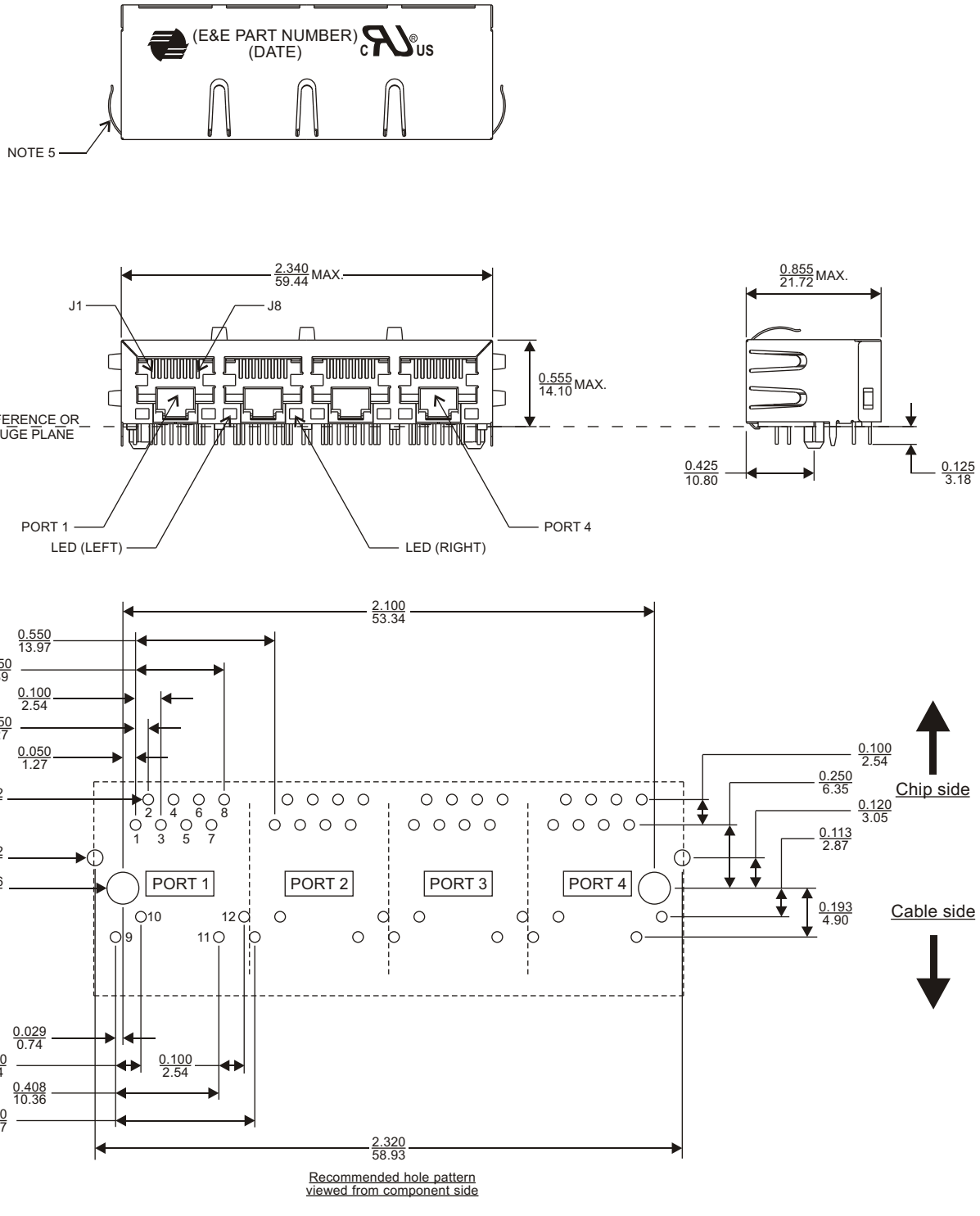
10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14D-01A



Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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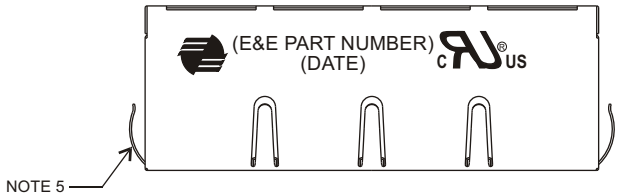
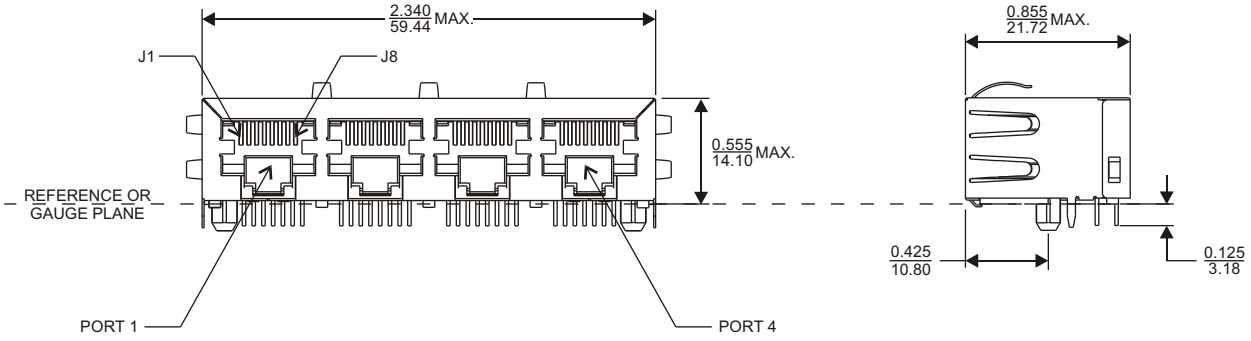
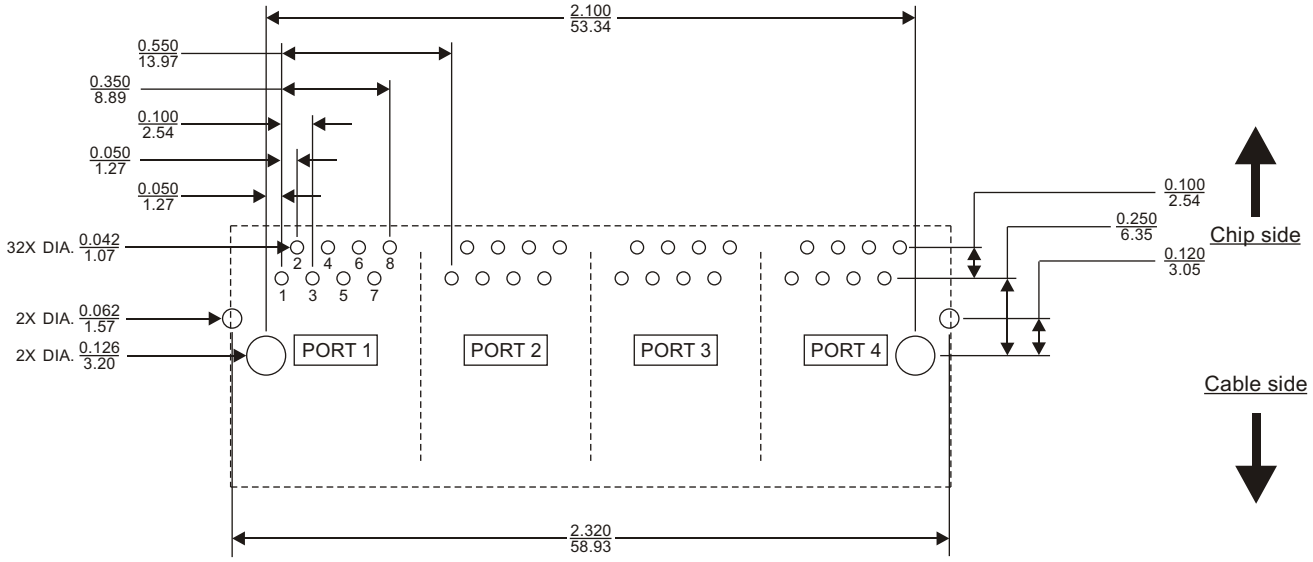
10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14D-01C







Recommended hole pattern
viewed from component side

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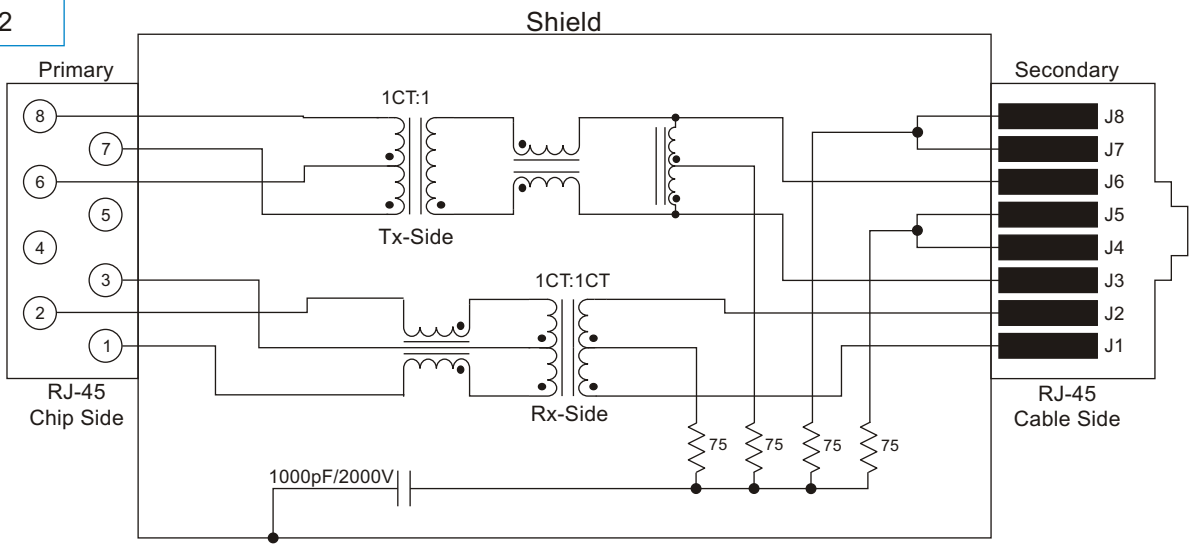
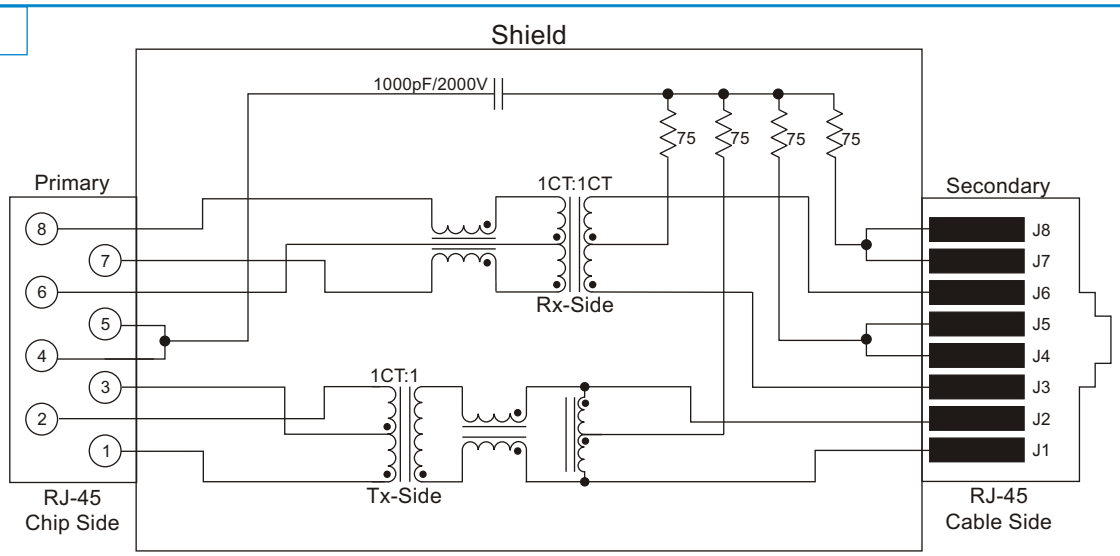
10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

SCHEMATICS

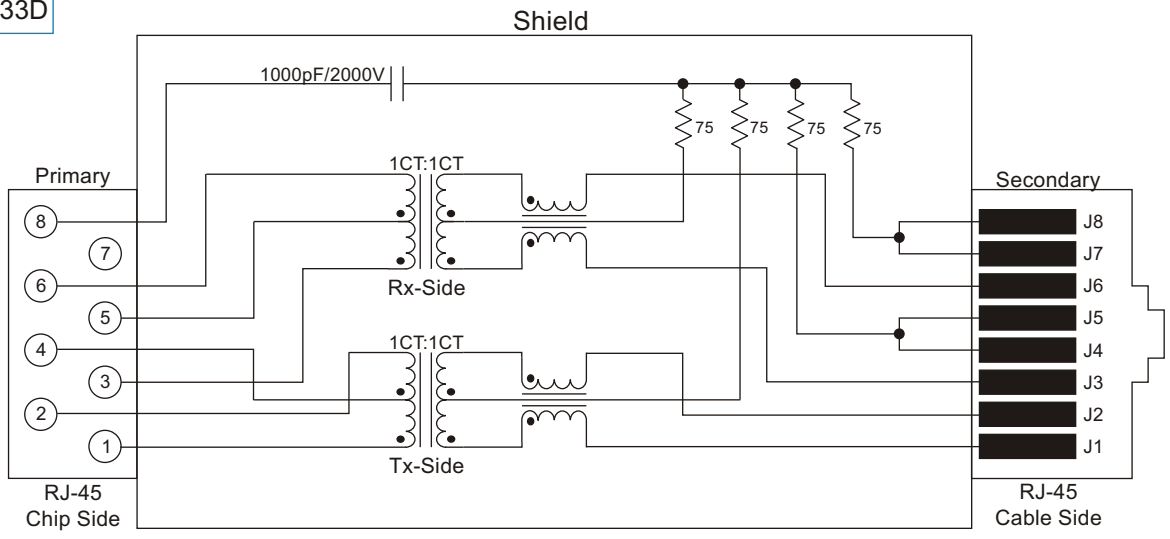
H152



H301



H33D / K33D



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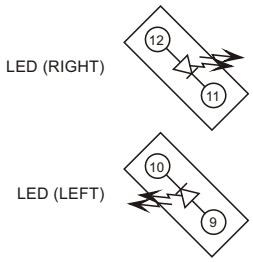
10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Zigzag Output Pins Pattern

LEDs Color And Polarity

MJ14D-01A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 9	PIN 10		PIN 12	PIN 11
	GREEN	+	—	YELLOW	+	—

LED Specification @25°C, Forward Current = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[7]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

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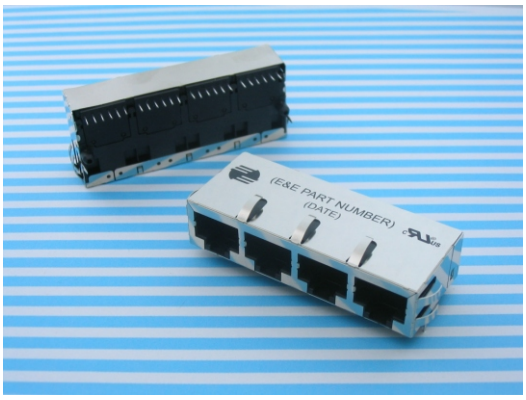
E & E Magnetic Products Limited

10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Straight-row Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- Gang 1x4 design for Hub and Switch Applications
- Symmetrical TX and RX channels which is suitable for Auto MDI/MDIX application
- UL 1863 listed
- RoHS compliant



General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR14D2NNA4-H34K	1CT:1CT	1CT:1CT	TC	TC	—	MJ14D-04A	H34K
MJR14D2NNA4-K34K[7]	1CT:1CT	1CT:1CT	TC	TC	—	MJ14D-04A	K34K

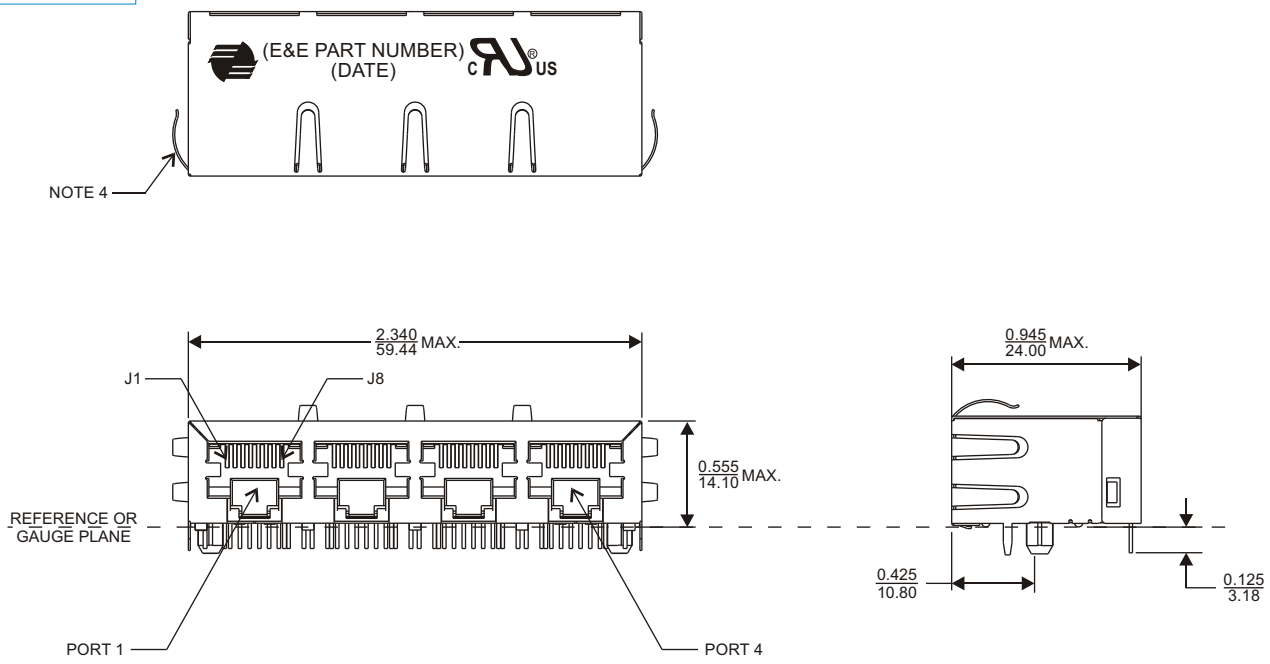
Notes:

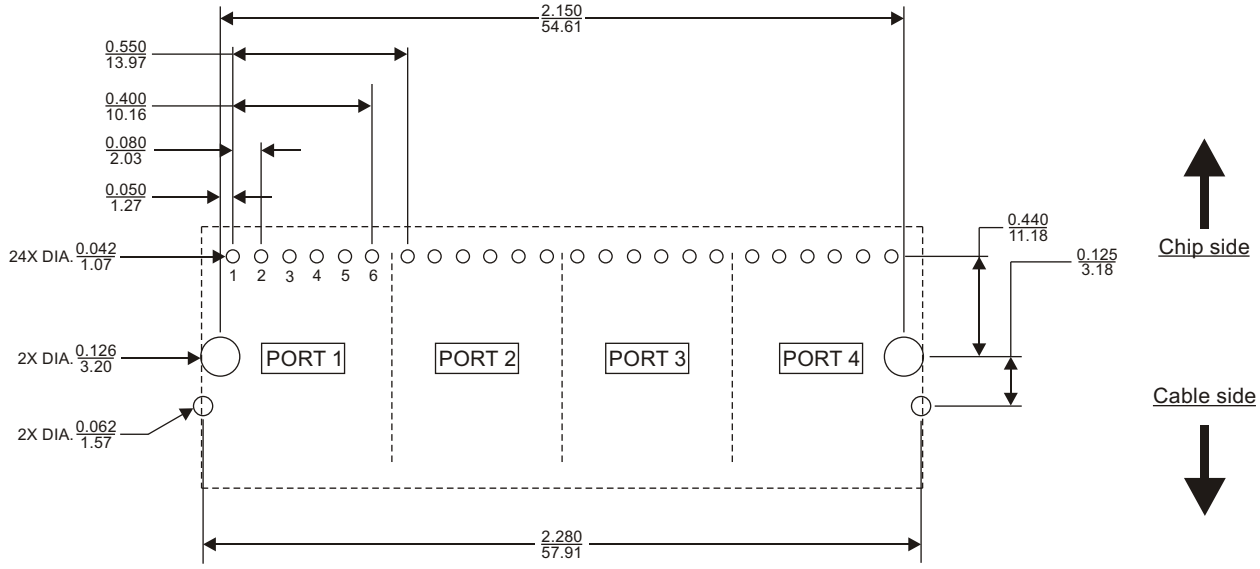
1. Ordering Information: MJR14D2NNA4-abbbc.
   MJR14D2NNA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   abbb = Schematic code(H34K/K34K).
   c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ;
4. LEDs (Left / Right) : "—" = None.
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
7. Operating temperature: -40°C to +85°C.

10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Straight-row Output Pins Pattern

MECHANICAL DIMENSIONS

MJ14D-04A





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

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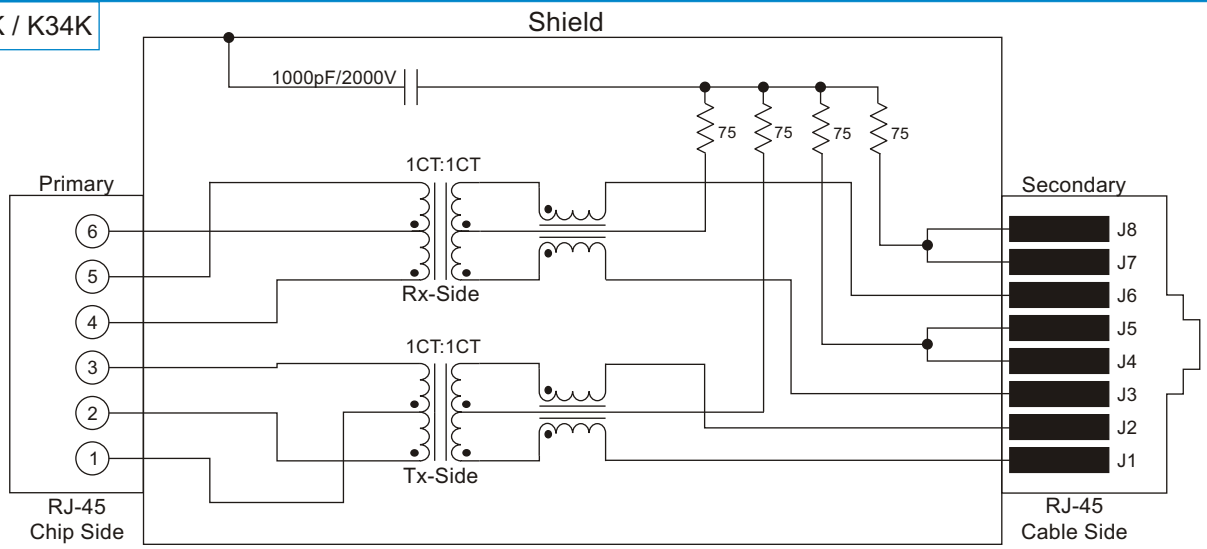
10/100 Base-T Applications
Gang 1X4, Through Hole, Tab Down
Straight-row Output Pins Pattern

SCHEMATICS

H34K / K34K



MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- Stacked design for Hub and Switch Applications
- Symmetrical TX and RX channels which is suitable for Auto MDI/MDIX application
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR24N2EEA0-H14N	1CT:1CT	1CT:1CT	TC	TC	E / E	MJ24N-05A	H14N
MJR26N2EEA0-H14N	1CT:1CT	1CT:1CT	TC	TC	E / E	MJ26N-05A	H14N
MJR28N2EEA0-H14N	1CT:1CT	1CT:1CT	TC	TC	E / E	MJ28N-05A	H14N

Notes:

1. Ordering Information: MJR24N2EEA0-abbbc/MJR26N2EEA0-abbbc/MJR28N2EEA0-abbbc.
   - MJR24N2EEA0 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2EEA0 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2EEA0 = Product Type (xxRxxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(H14N).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; 'C" = Common-mode choke ;
4. LEDs (Left / Right) : "E" = Orange & Green bi-color (3 terminals type). For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

Materials

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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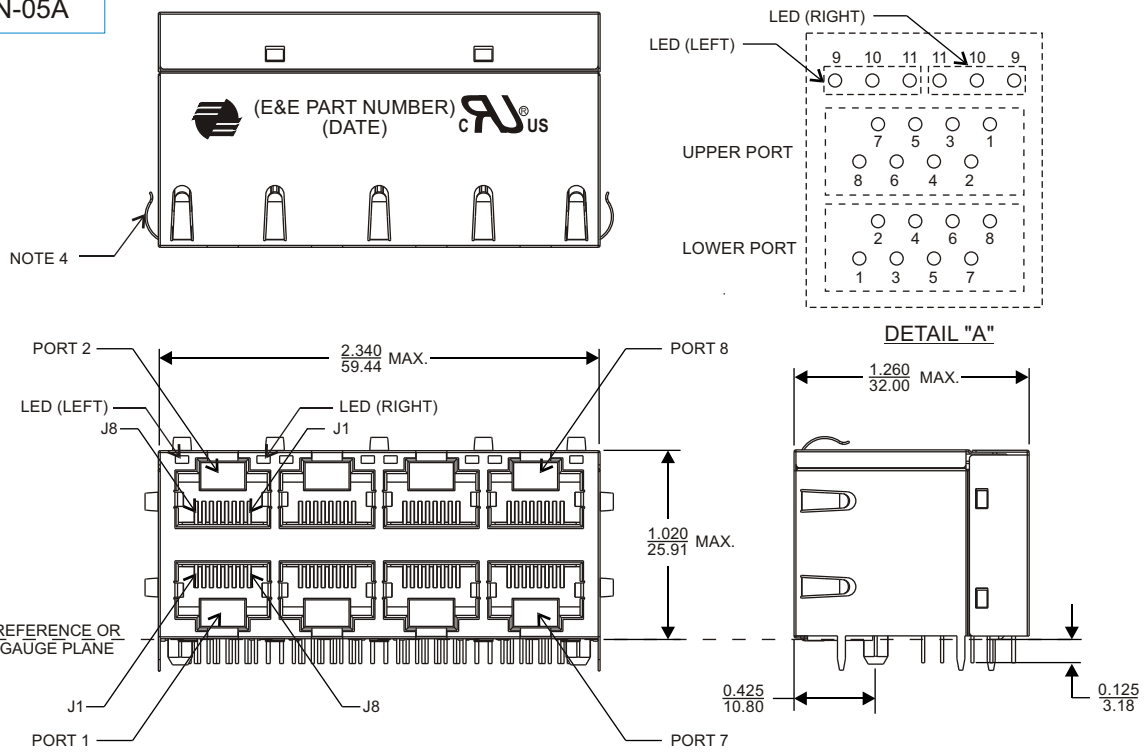
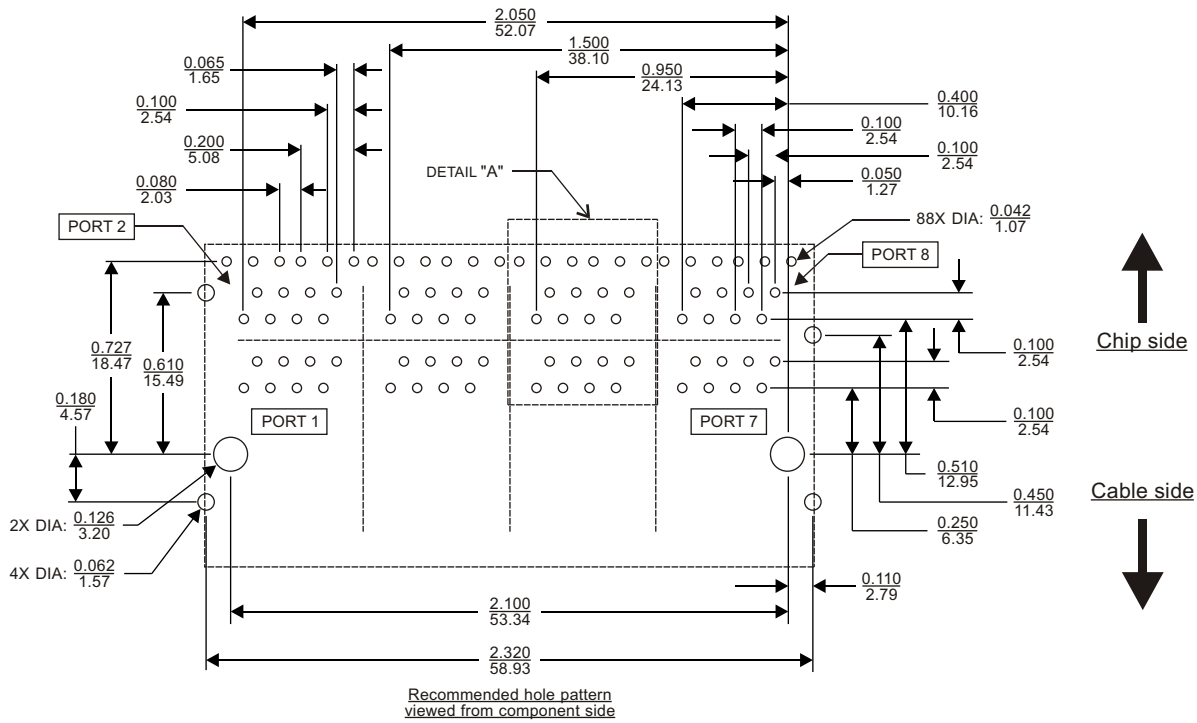
10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ24N-05A





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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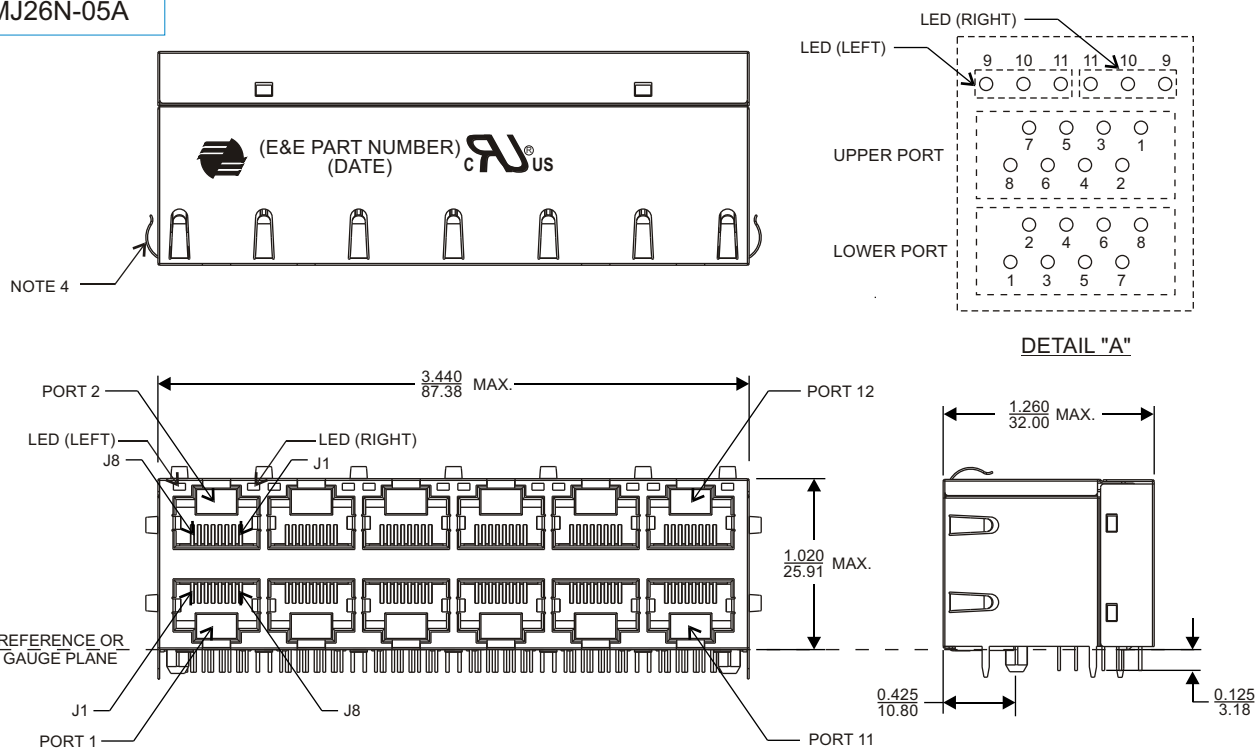
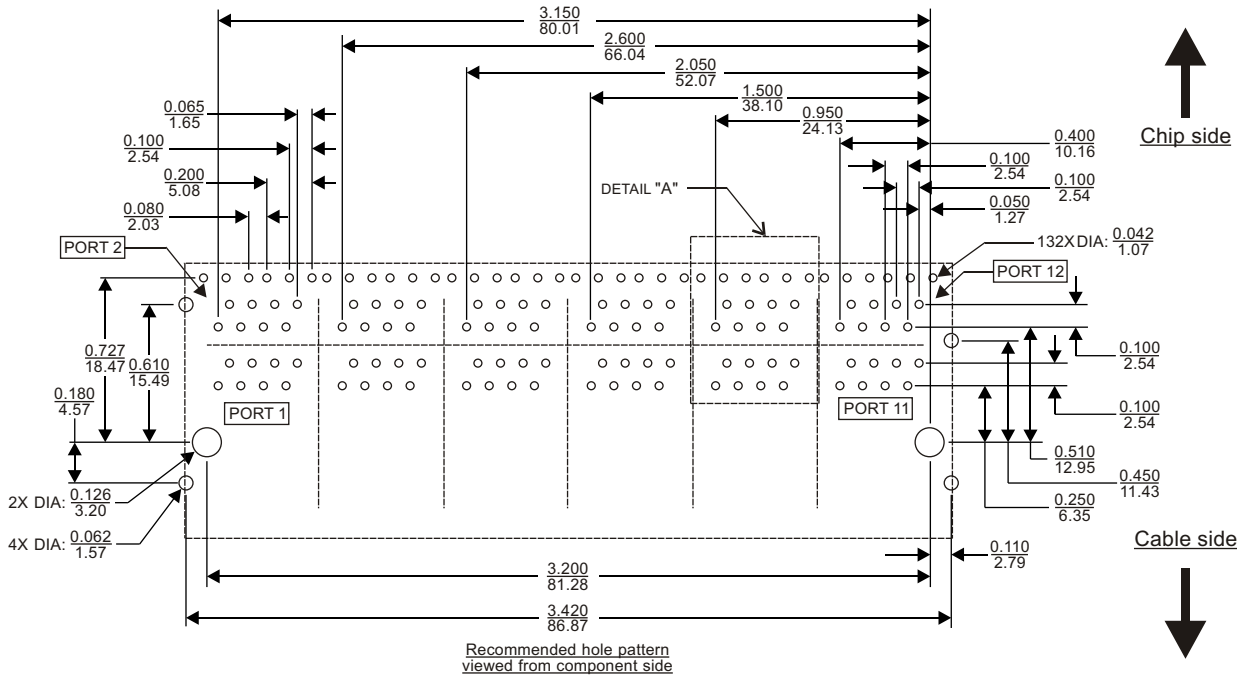
10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ26N-05A





Recommended hole pattern
viewed from component side

All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

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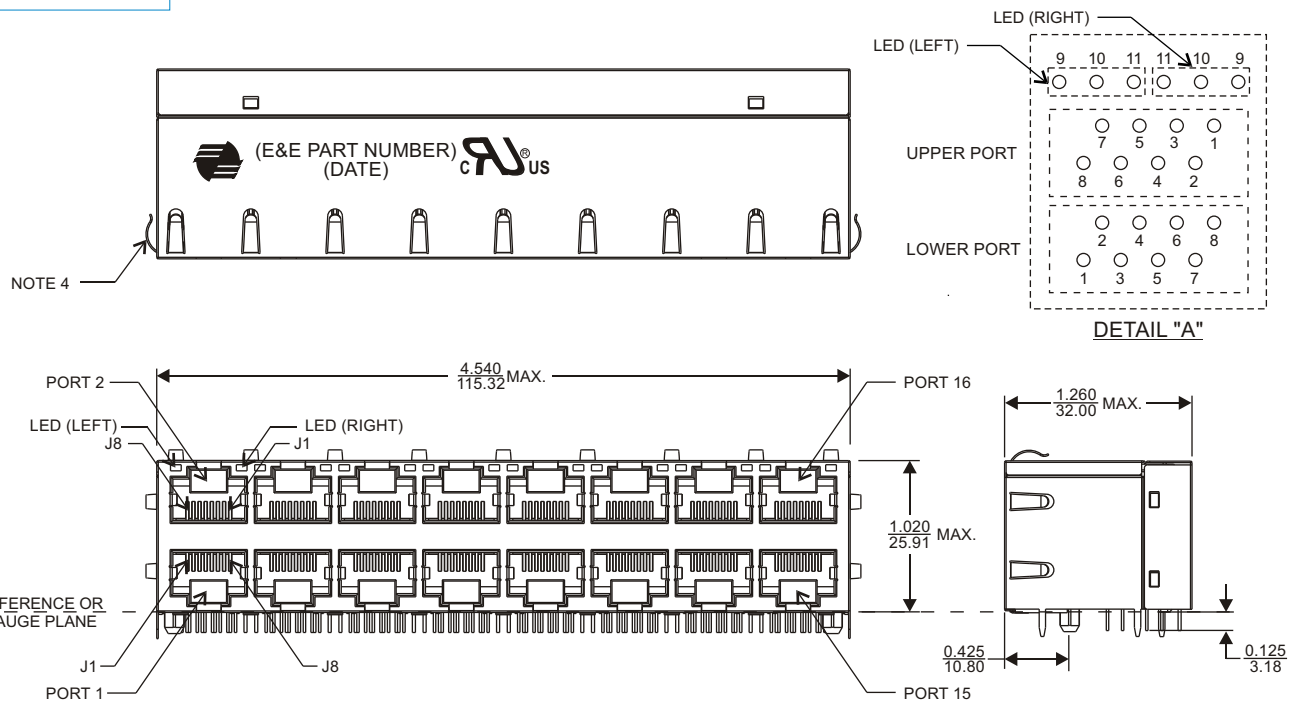
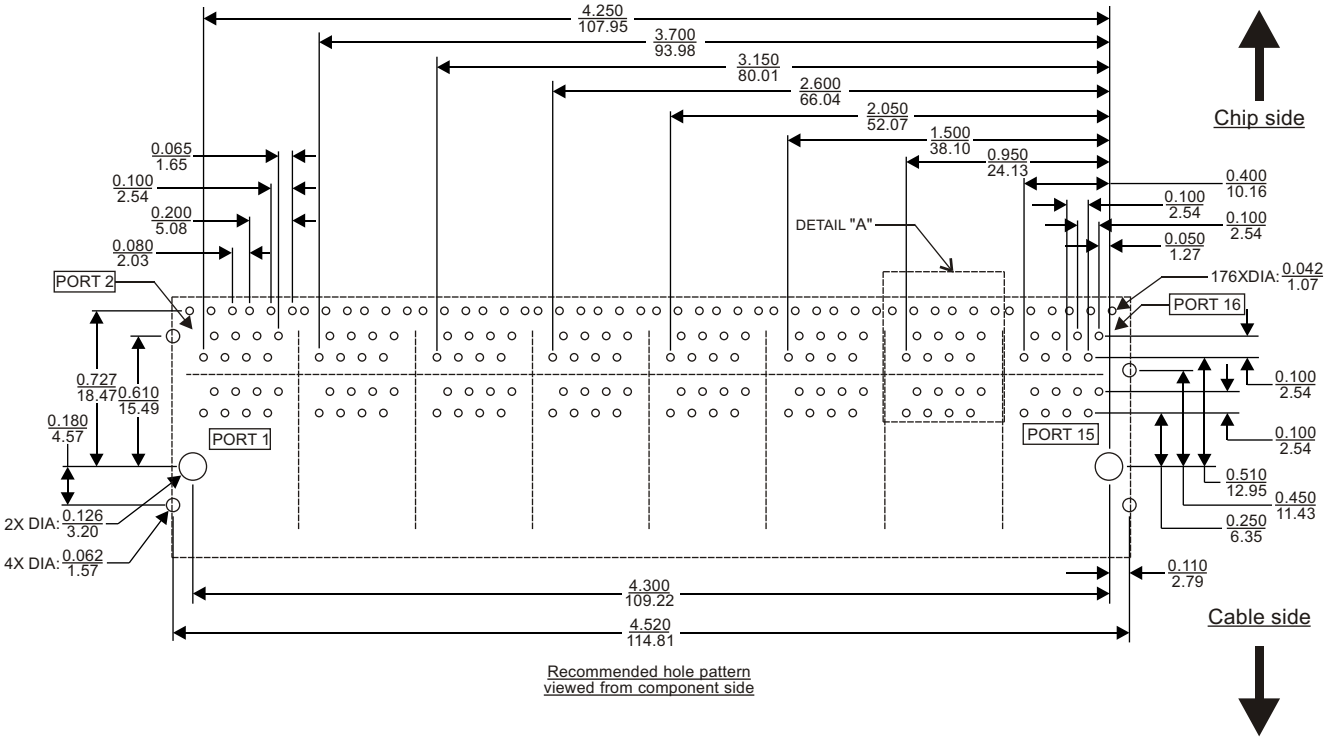
10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ28N-05A





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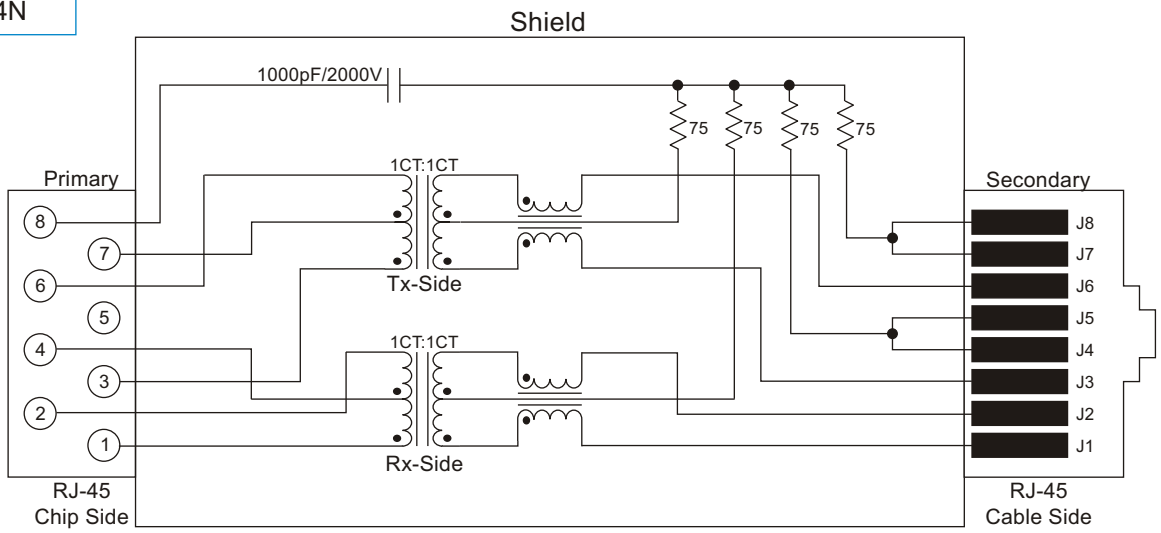
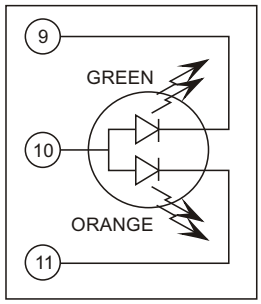
10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

SCHEMATICS (EACH PORT)

H14N



LEDs COLOR AND POLARITY



COLOR	POLARITY		COLOR	POLARITY	
	PIN 10	PIN 9		PIN 10	PIN 11
GREEN	+	—	ORANGE	+	—

LED SPECIFICATION @25°C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Orange	607	2.05	2.5

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Support various 10/100 transceiver ICs
- Operating temperature 0°C to +70°C
- Stacked design for Hub and Switch applications
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR24N2NNA0-H10Y	1CT:1CT	1CT:1CT	TC	TC	—	MJ24N-01A	H10Y
MJR24N2NNA0-H14G	1CT:1CT	1CT:1CT	TC	TC	—	MJ24N-01A	H14G
MJR24N2NNA0-H14H	1CT:1	1CT:1CT	TCA	CT	—	MJ24N-01A	H14H
MJR26N2NNA0-H10Y	1CT:1CT	1CT:1CT	TC	TC	—	MJ26N-01A	H10Y
MJR26N2NNA0-H14G	1CT:1CT	1CT:1CT	TC	TC	—	MJ26N-01A	H14G
MJR26N2NNA0-H14H	1CT:1	1CT:1CT	TCA	CT	—	MJ26N-01A	H14H
MJR28N2NNA0-H10Y	1CT:1CT	1CT:1CT	TC	TC	—	MJ28N-01A	H10Y
MJR28N2NNA0-H14G	1CT:1CT	1CT:1CT	TC	TC	—	MJ28N-01A	H14G
MJR28N2NNA0-H14H	1CT:1	1CT:1CT	TCA	CT	—	MJ28N-01A	H14H

Notes:

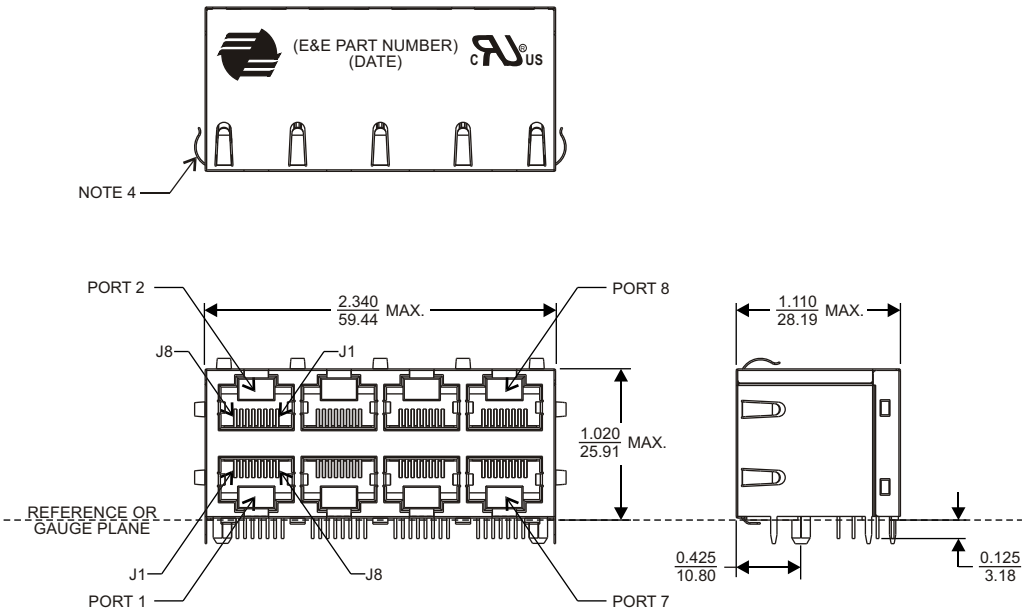
1. Ordering Information: MJR24N2NNA0-abbbc/MJR26N2NNA0-abbbc/MJR28N2NNA0-abbbc.
   - MJR24N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(H10Y/H14G/H14H).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "–" = None.
5. Panel tabs are optional.
6. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

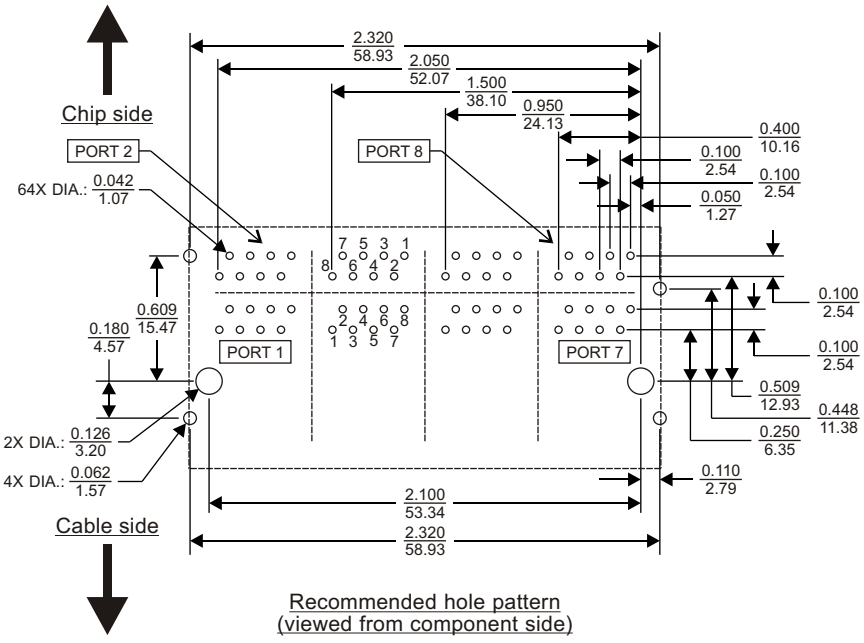
1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ24N-01A





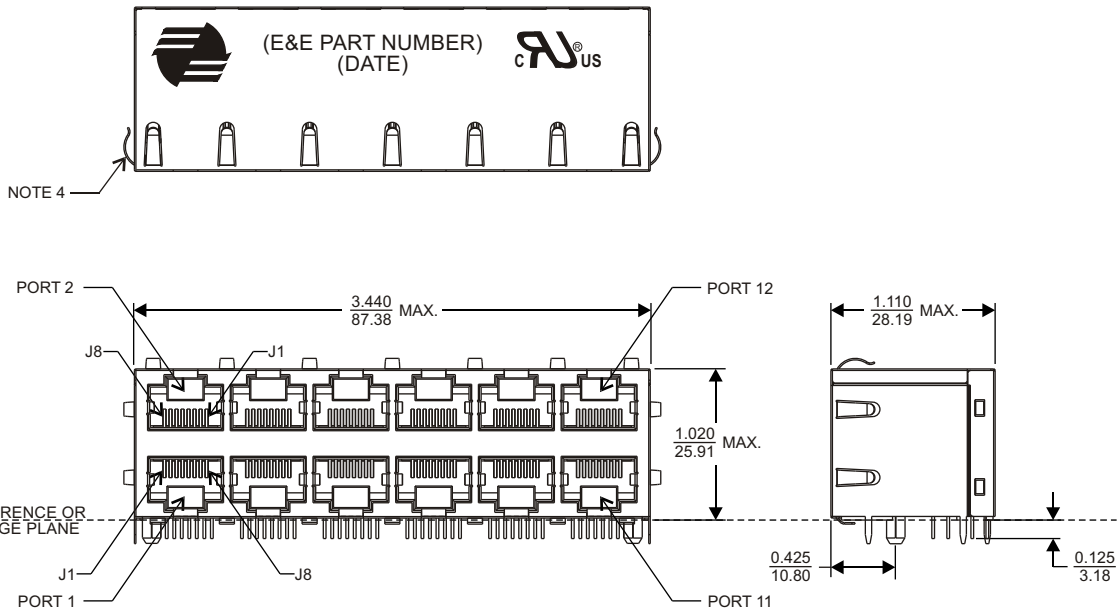
All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

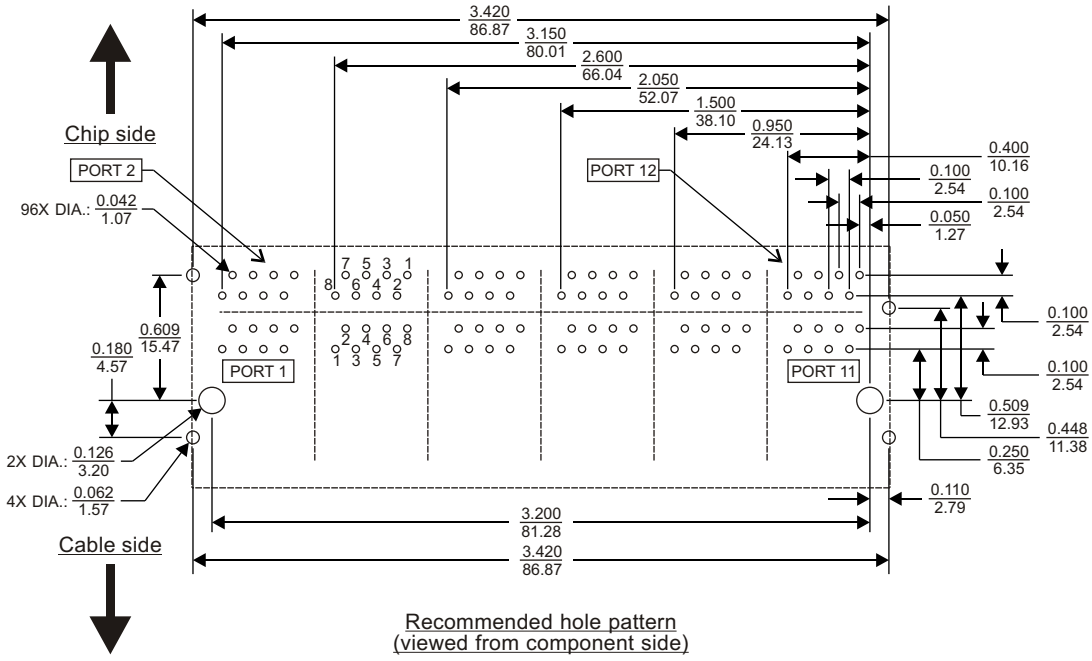
Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ26N-01A





Recommended hole pattern
(viewed from component side)

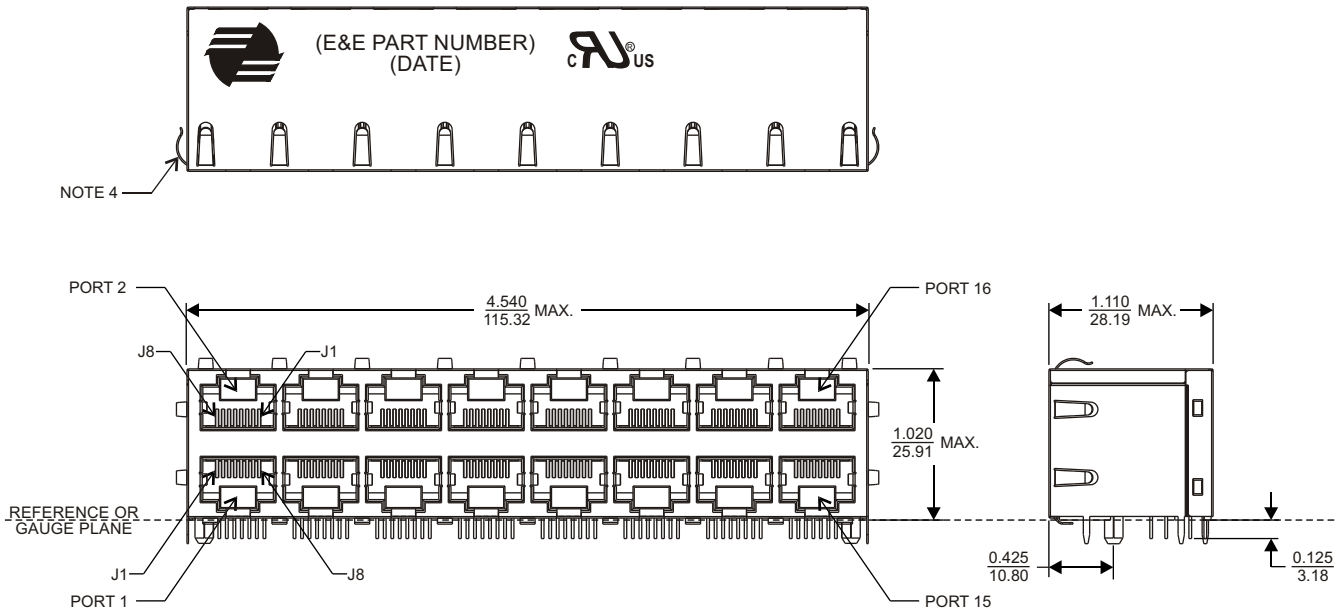
All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

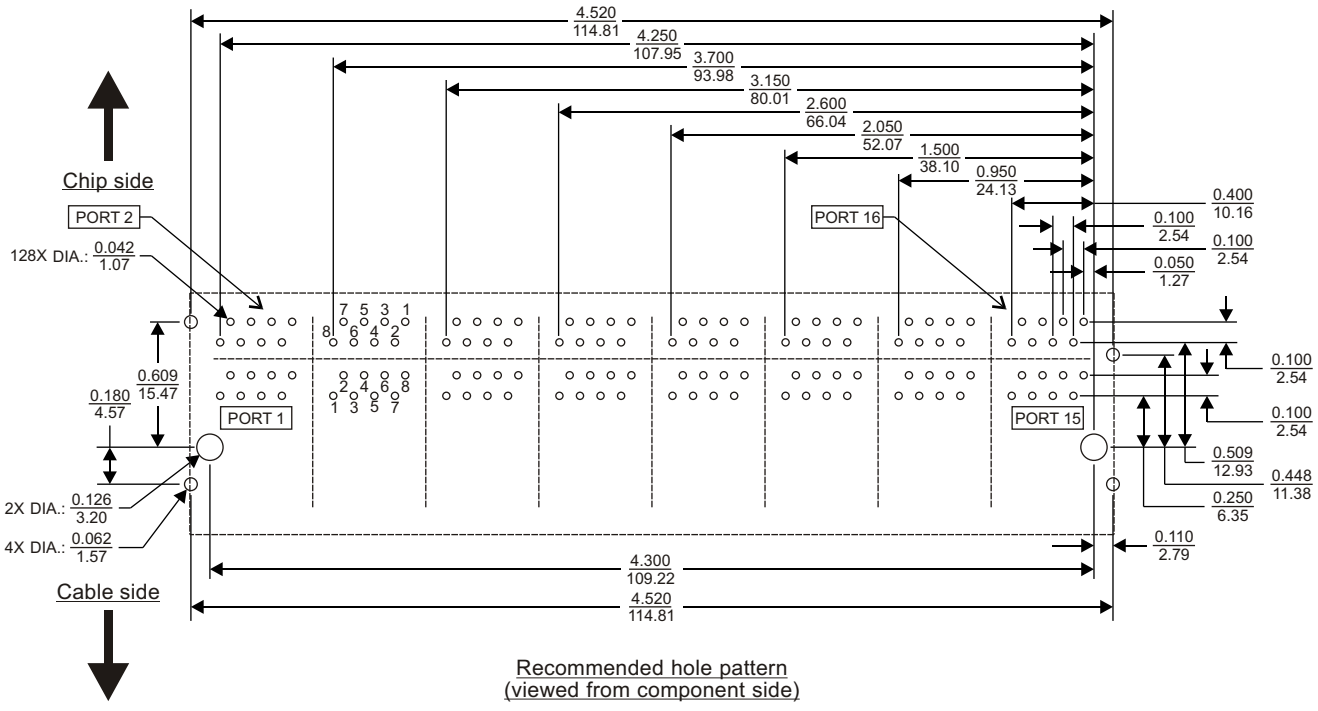
Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

MECHANICAL DIMENSIONS

MJ28N-01A





Recommended hole pattern
(viewed from component side)

All dimensions are specified in inch / mm with higher precedence in inch.

Unless otherwise specified, all tolerances are ± 0.010 / 0.25 .

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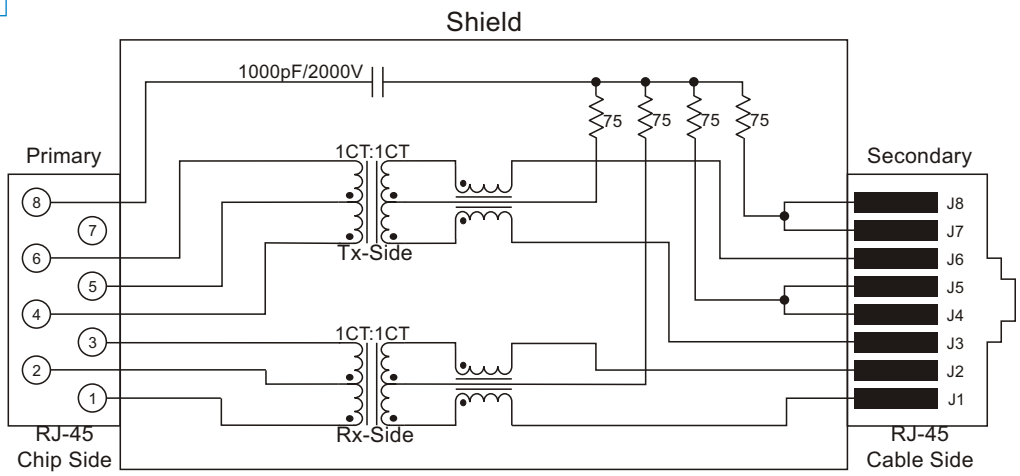
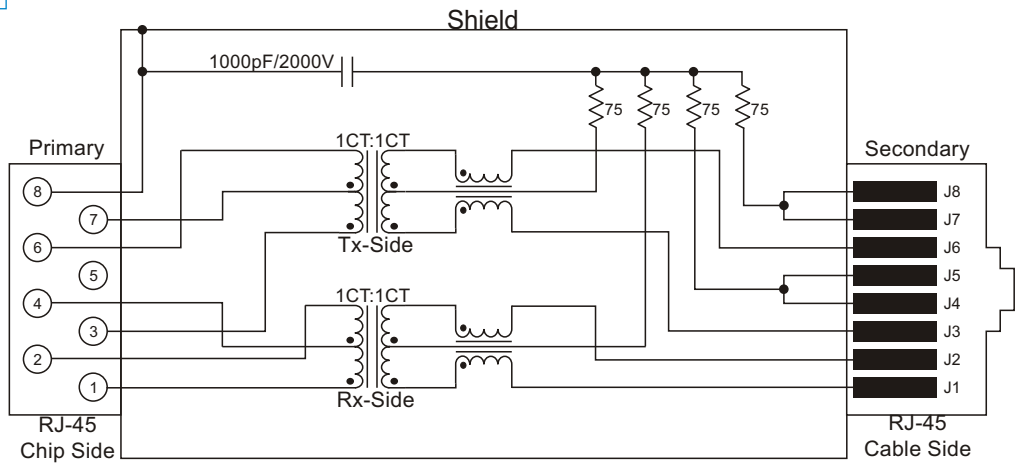
10/100 Base-T Applications
Stack 2XN, Through Hole
Zigzag Output Pins Pattern

SCHEMATICS (EACH PORT)

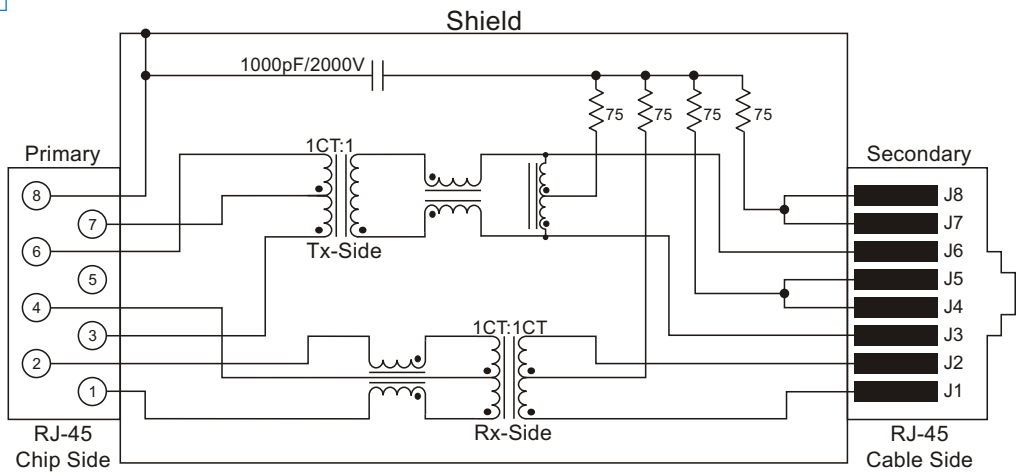
H10Y



H14G



H14H



MATERIALS	
Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

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10/100 Base-T Applications
2XN Stacked, Though Hole
Zigzag Output Pins Pattern
(With PoE feature and TVS device)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3af standard including 350 H OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- 350mA balanced DC line current capability
- Enhanced performance on EMI suppression with metal shield
- Operating temperature 0°C to +70°C
- Featured with Transient Voltage Suppression (TVS)
- Designed for Power over Ethernet (PoE) enabled Switch / Router / Hub applications
- UL 1863 listed
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
2.0	16.0	14.0	13.0	12.0	42.0	37.0	30.0	30.0	1500

Part Number Table

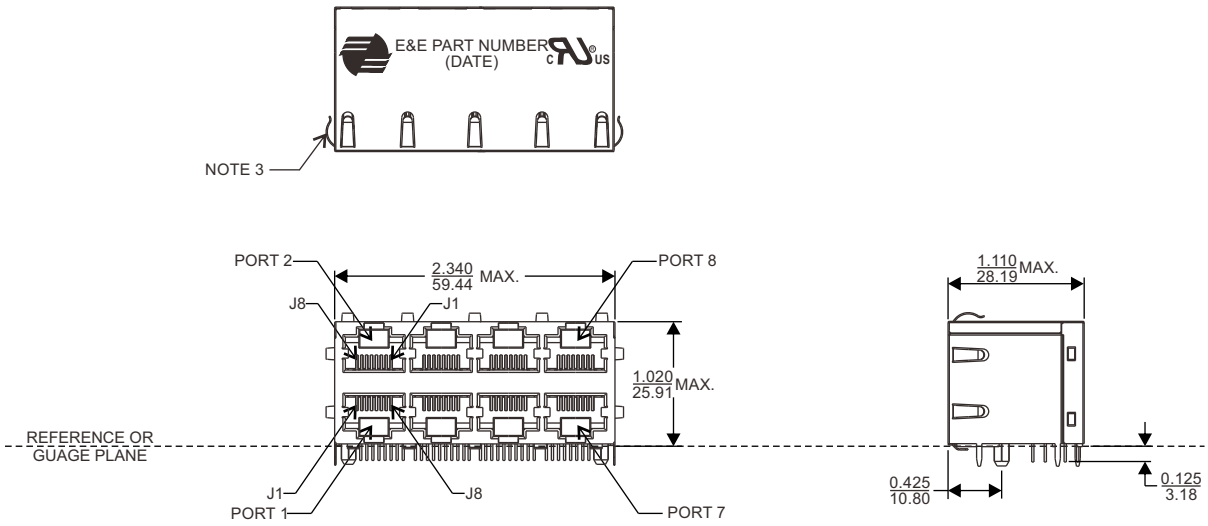
Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		Platform	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR24N2NNA0-V700U	1CT:1CT	1CT:1CT	TS	TS	2x4	MJ24N-01A	V700U
MJR26N2NNA0-V700U	1CT:1CT	1CT:1CT	TS	TS	2x6	MJ26N-01A	V700U
MJR28N2NNA0-V700U	1CT:1CT	1CT:1CT	TS	TS	2x8	MJ28N-01A	V700U

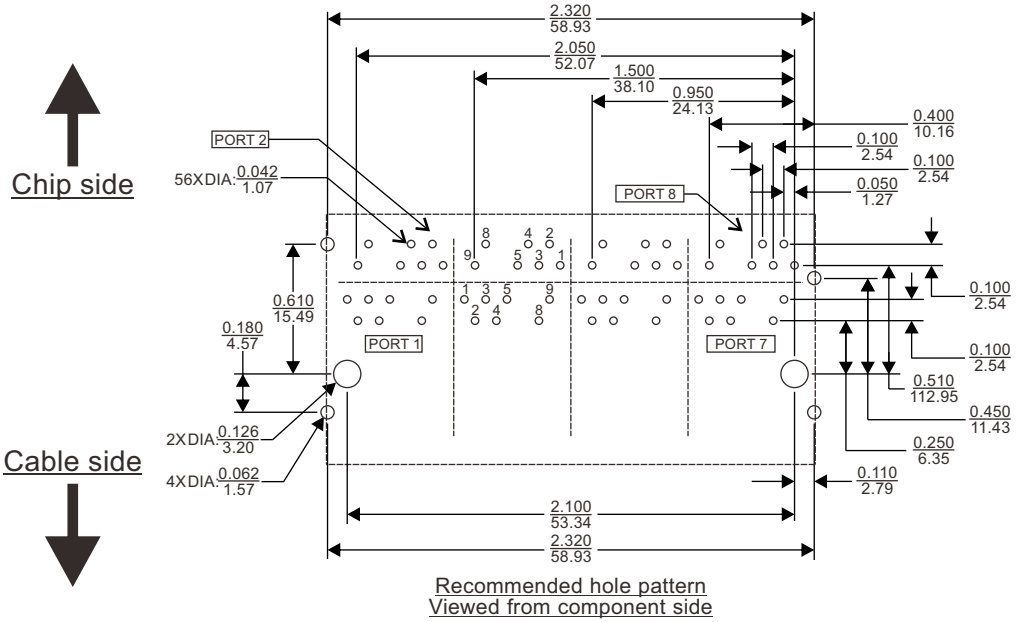
Notes:

1. Ordering Information: MJR24N2NNA0-abbbbc/MJR26N2NNA0-abbbbc/MJR28N2NNA0-abbbbc.
   - MJR24N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2NNA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbbb = Schematic code(V700U).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "S" = Shared Common-mode choke
4. Panel tabs are optional.
5. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

MECHANICAL DIMENSIONS

MJ24N-01A





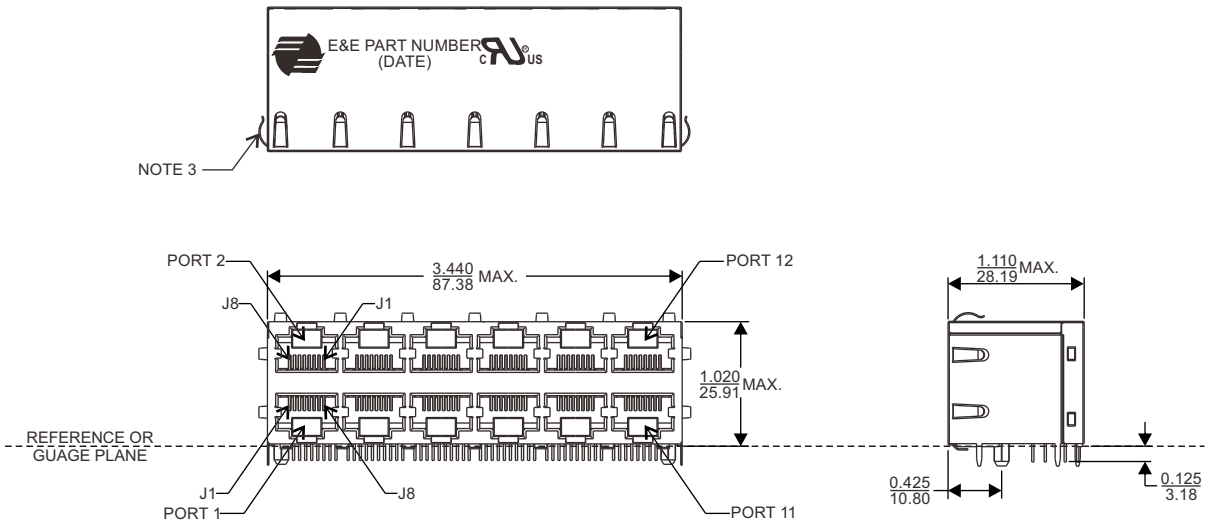
Recommended hole pattern
Viewed from component side

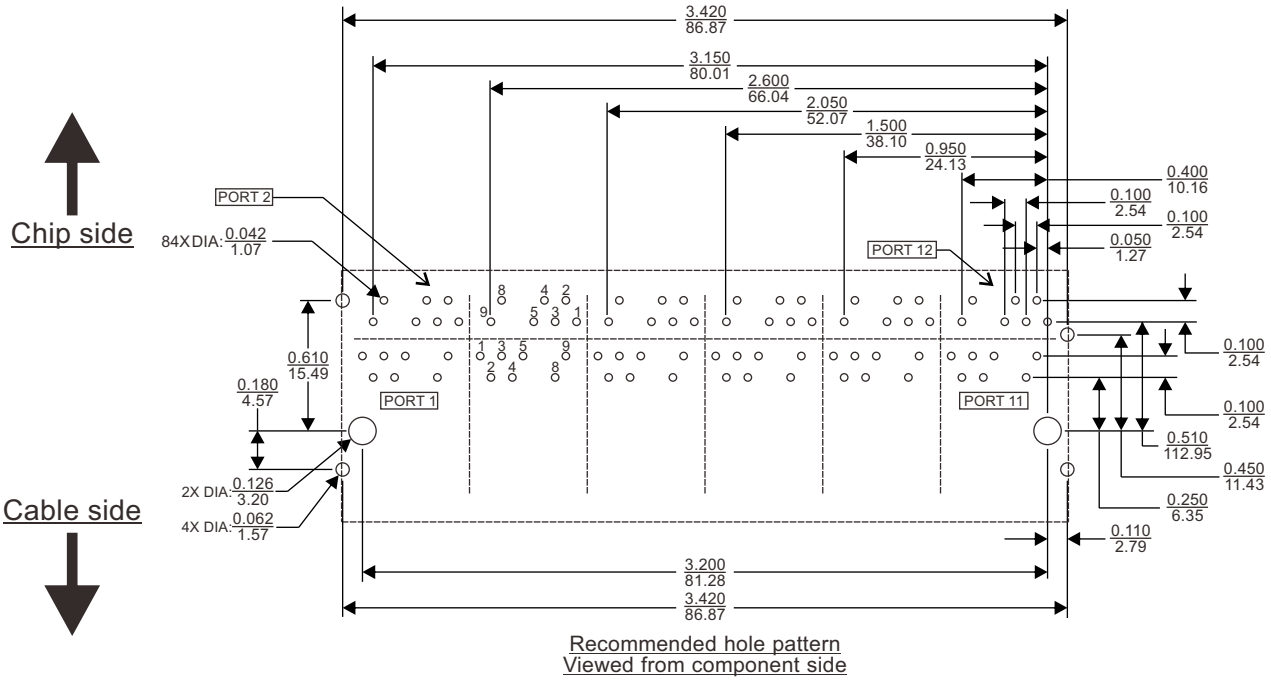
All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

MECHANICAL DIMENSIONS

MJ26N-01A





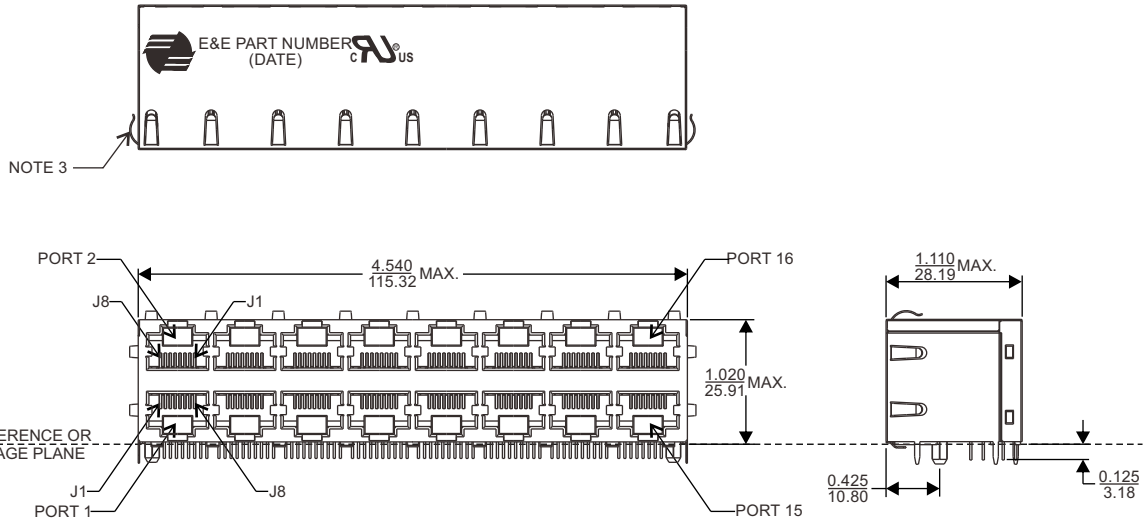
Recommended hole pattern
Viewed from component side

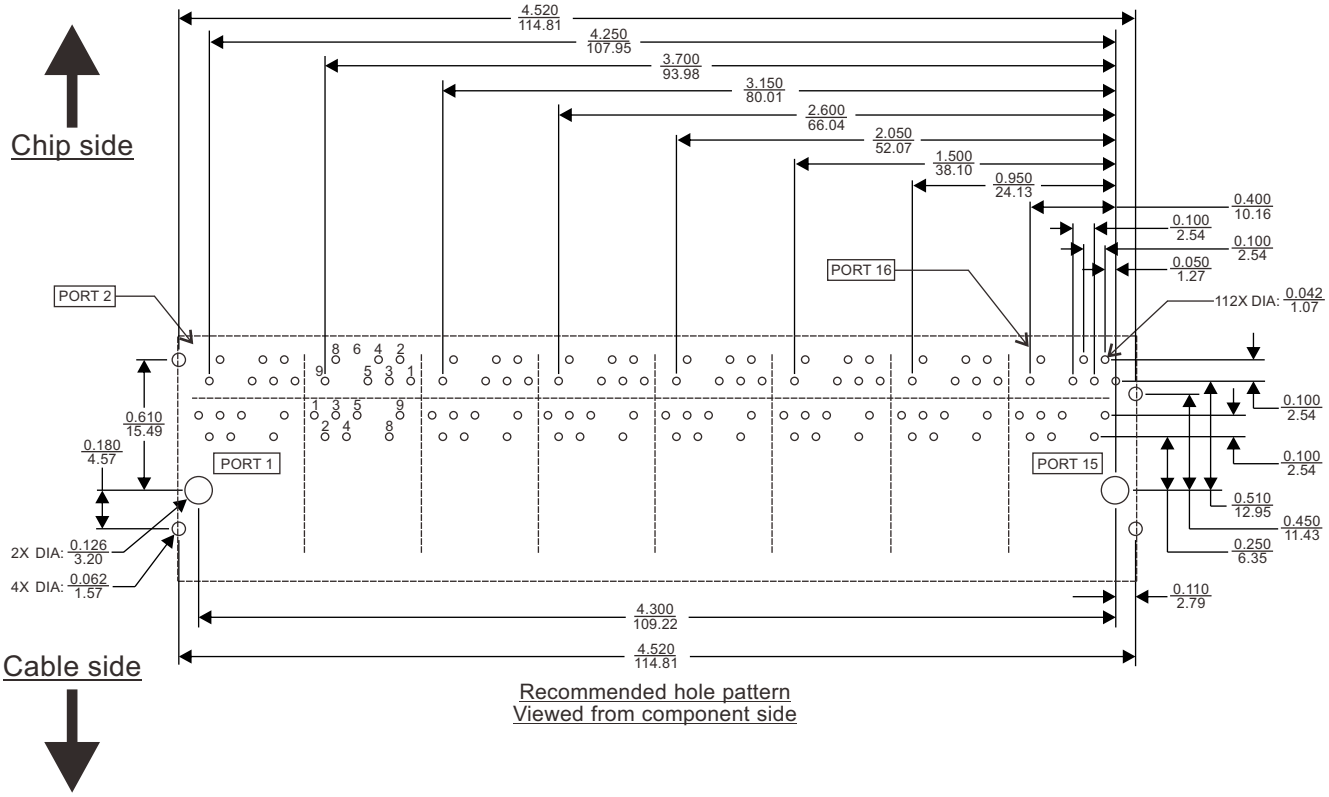
All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

MECHANICAL DIMENSIONS

MJ28N-01A





Recommended hole pattern
Viewed from component side

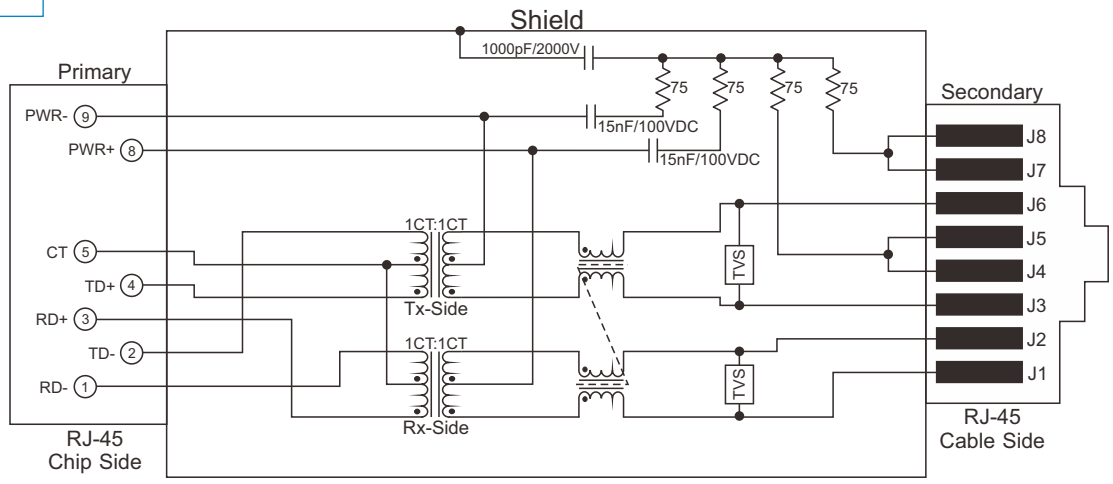
All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

10/100 Base-T Applications
2XN Stacked, Though Hole
Zigzag Output Pins Pattern
(With PoE feature and TVS device)

SCHEMATICS (EACH PORT)

V700U



MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[5]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
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E & E Magnetic Products Limited

10/100 Base-T Applications
2XN Stacked, Though Hole
Vertical-row of Zigzag Output Pins Pattern
(With PoE feature)

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3af standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- 350mA balanced DC line current capability
- Enhanced performance on EMI suppression with metal shield
- Operating temperature 0°C to +70°C
- Symmetrical TX and RX channels which is suitable for Auto MDI/MDIX application
- Designed for Power over Ethernet (PoE) enabled switch / router / hub applications
- UL 1863 listed
- RoHS compliant

GENERAL ELECTRICAL SPECIFICATION @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)		CMRR (dB Min)	Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	2-30MHz	60-80MHz	0.1-100MHz	0.1-100MHz	
1.5	16.0	10.0	33.0	30.0	1500

PART NUMBER TABLE

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		Platform	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MJR24N2NNA20V70N	1CT:1CT	1CT:1CT	CT	CT	2x4	MJ24N-03A+0	V70N
MJR26N2NNA20V70N	1CT:1CT	1CT:1CT	CT	CT	2x6	MJ26N-03A+0	V70N
MJR28N2NNA20V70N	1CT:1CT	1CT:1CT	CT	CT	2x8	MJ28N-03A+0	V70N

Notes:

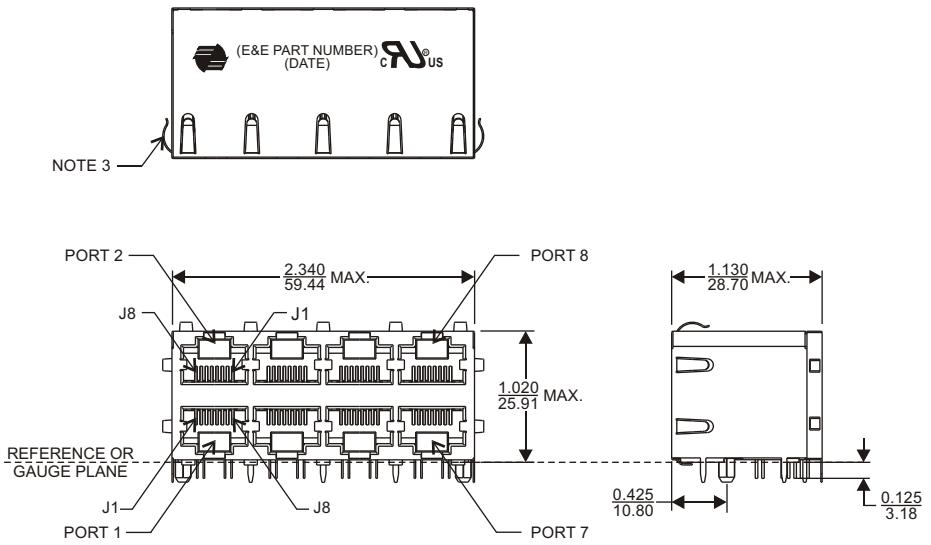
1. Ordering Information: MJR24N2NNA20abbbc/MJR26N2NNA20abbbc/MJR28N2NNA20abbbc.
   - MJR24N2NNA20 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR26N2NNA20 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MJR28N2NNA20 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(V70N).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke
4. Panel tabs are optional.
5. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area.
   Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.

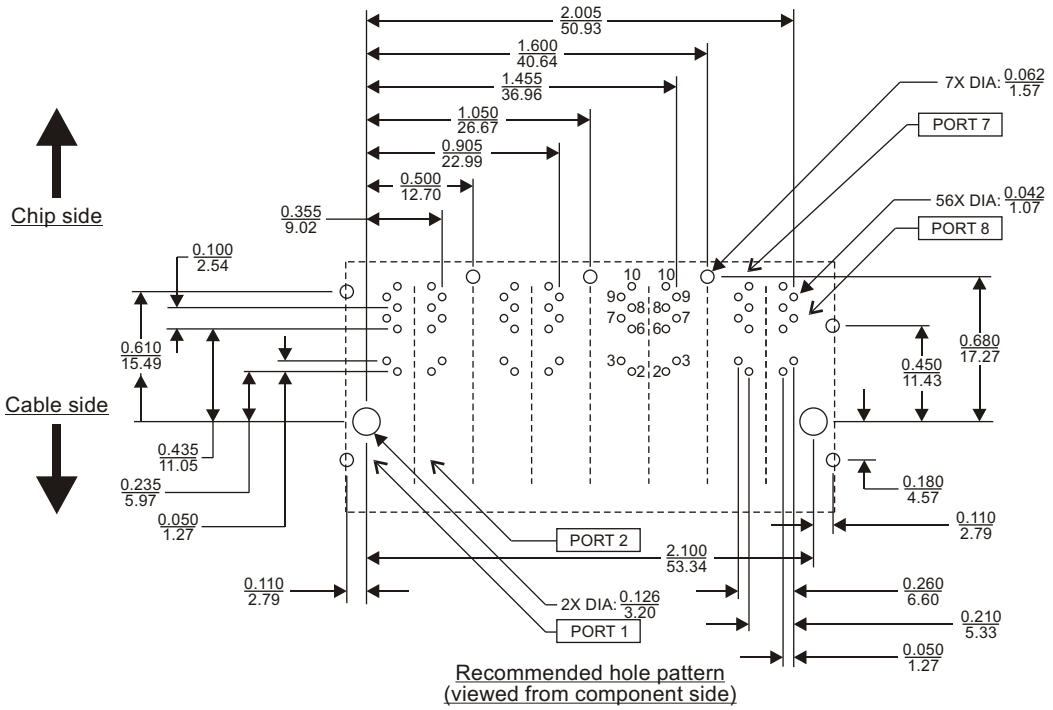
1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

10/100 Base-T Applications
2XN Stacked, Though Hole
Vertical-row of Zigzag Output Pins Pattern
(With PoE feature)

MECHANICAL DIMENSIONS

MJ24N-03A+0





All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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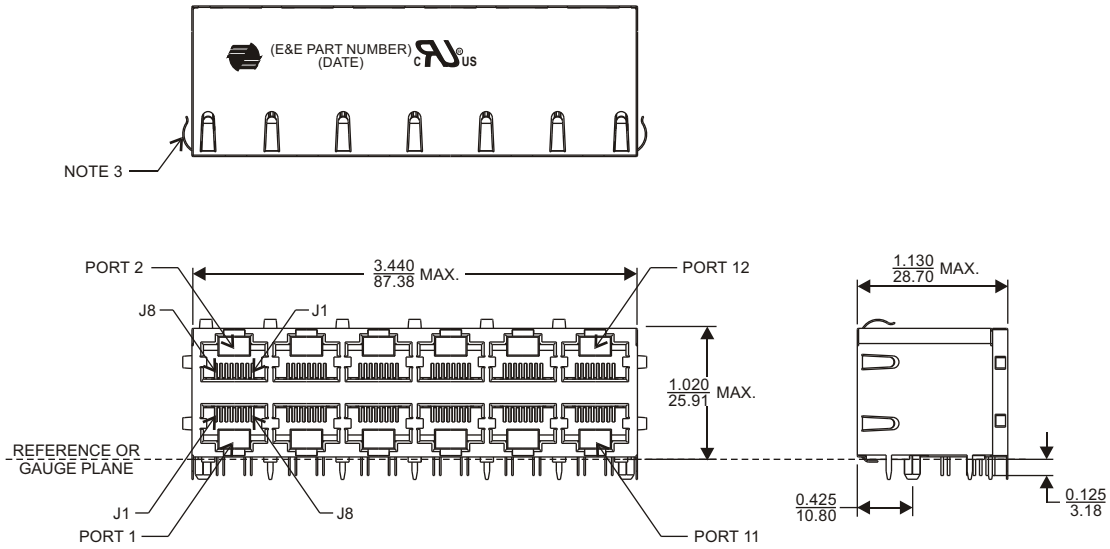
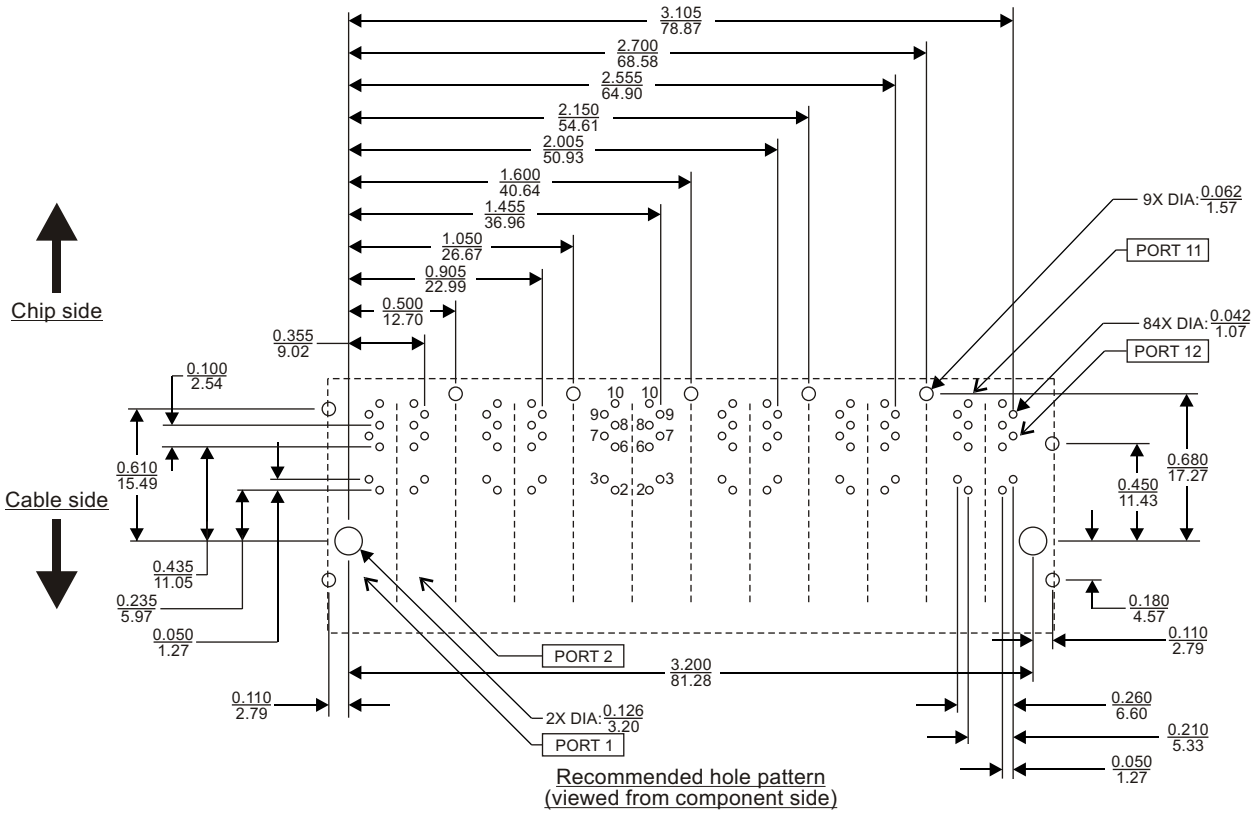
10/100 Base-T Applications
2XN Stacked, Though Hole
Vertical-row of Zigzag Output Pins Pattern
(With PoE feature)

MECHANICAL DIMENSIONS

MJ26N-03A+0





All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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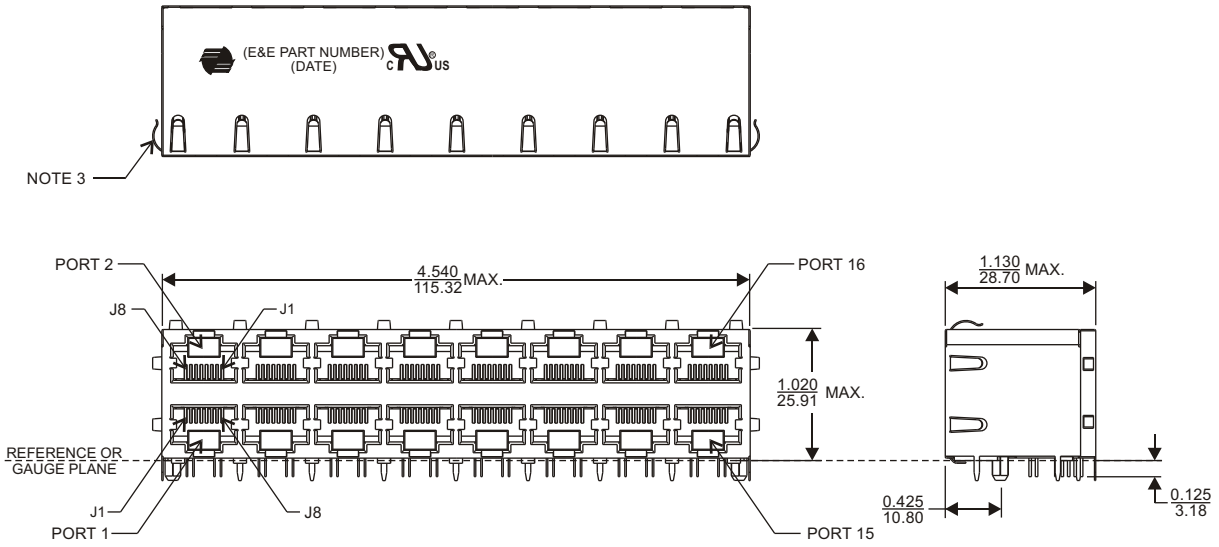
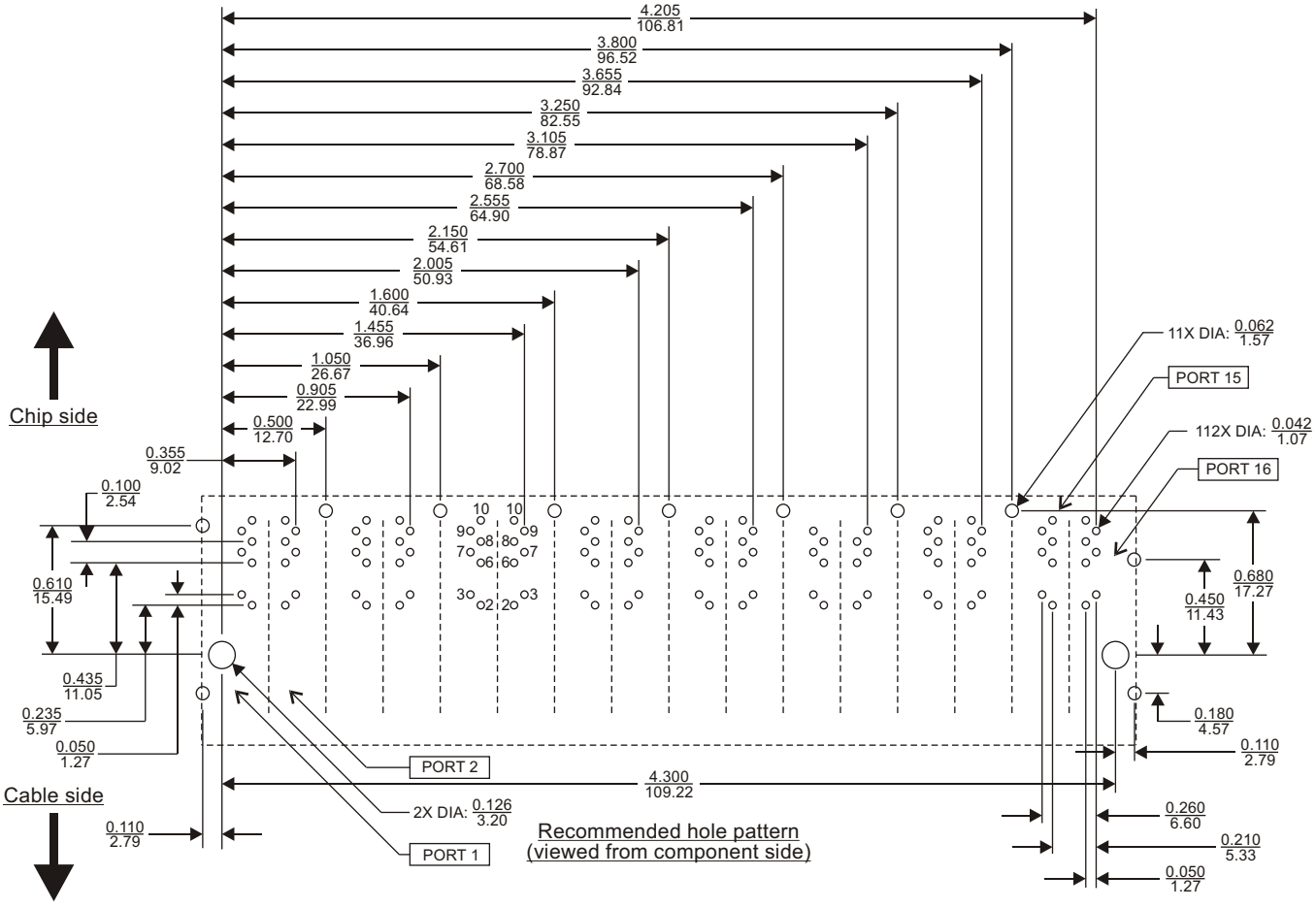
10/100 Base-T Applications
2XN Stacked, Though Hole
Vertical-row of Zigzag Output Pins Pattern
(With PoE feature)

MECHANICAL DIMENSIONS

MJ28N-03A+0





All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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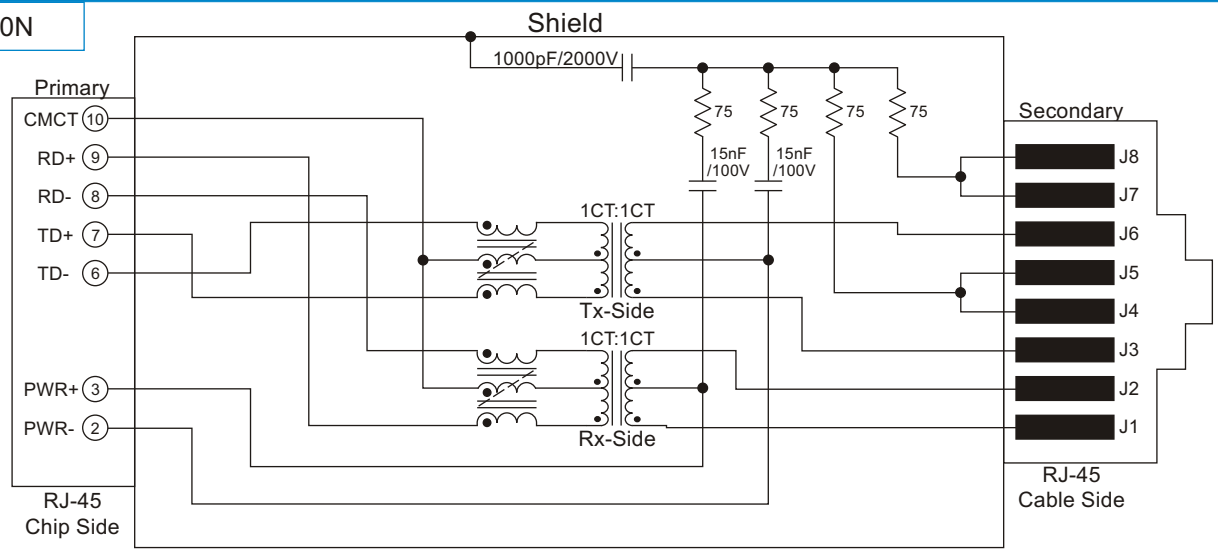
E & E Magnetic Products Limited

10/100 Base-T Applications
2XN Stacked, Though Hole
Vertical-row of Zigzag Output Pins Pattern
(With PoE feature)

SCHEMATICS

V70N



MATERIALS

Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[5]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

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Elec & Eltek依利安達
E & E Magnetic Products Limited

10/100 Base-T Applications
Combo Type, RJ-45 + 2 USB Ports

- Magnetic Integrated Connector Modules
- Compliant with IEEE802.3 standard including 350 μH OCL with 8mA DC Bias
- 1500Vrms isolation voltage per IEEE802.3
- Enhanced performance on EMI suppression with metal shield
- Operating temperature 0°C to +70°C
- RoHS compliant

General Electrical Specification @ 25°C

Insertion Loss (dB Max)	Return Loss (dB Min)				CMRR (dB Min)			Crosstalk (dB Min)	Hipot (Vrms)
0.1-100MHz	1-30MHz	40MHz	50MHz	60-80MHz	32MHz	62MHz	100MHz	0.1-100MHz	
1.0	16.0	14.0	13.0	12.0	42.0	37.0	33.0	35.0	1500

Part Number Table (Without Panel Tab)

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MCR11A1GYA0-H34V	1CT:1	1CT:1CT	TCA	CT	G / Y	MC11A-01A	H34V

Part Number Table (With Panel Tabs)

Part Number[2]	Turn Ratio (Chip : Cable) (±3%)		Configuration[3]		LED[4] (Left / Right)	Mechanical Package	Schematic
	Tx	Rx	Tx	Rx			
MCR11A2GYA4-H34U	1CT:1	1CT:1CT	TCA	CT	G / Y	MC11A-02A	H34U
MCR11A2GYA4-H36E	1CT:1	1CT:1CT	TCA	CT	G / Y	MC11A-02A	H36E
MCR11A2GYA4-H34K	1CT:1CT	1CT:1CT	TC	TC	G / Y	MC11A-02A	H34K[5]
MCR11A2GYA4-K34K[8]	1CT:1CT	1CT:1CT	TC	TC	G / Y	MC11A-02A	K34K[5]

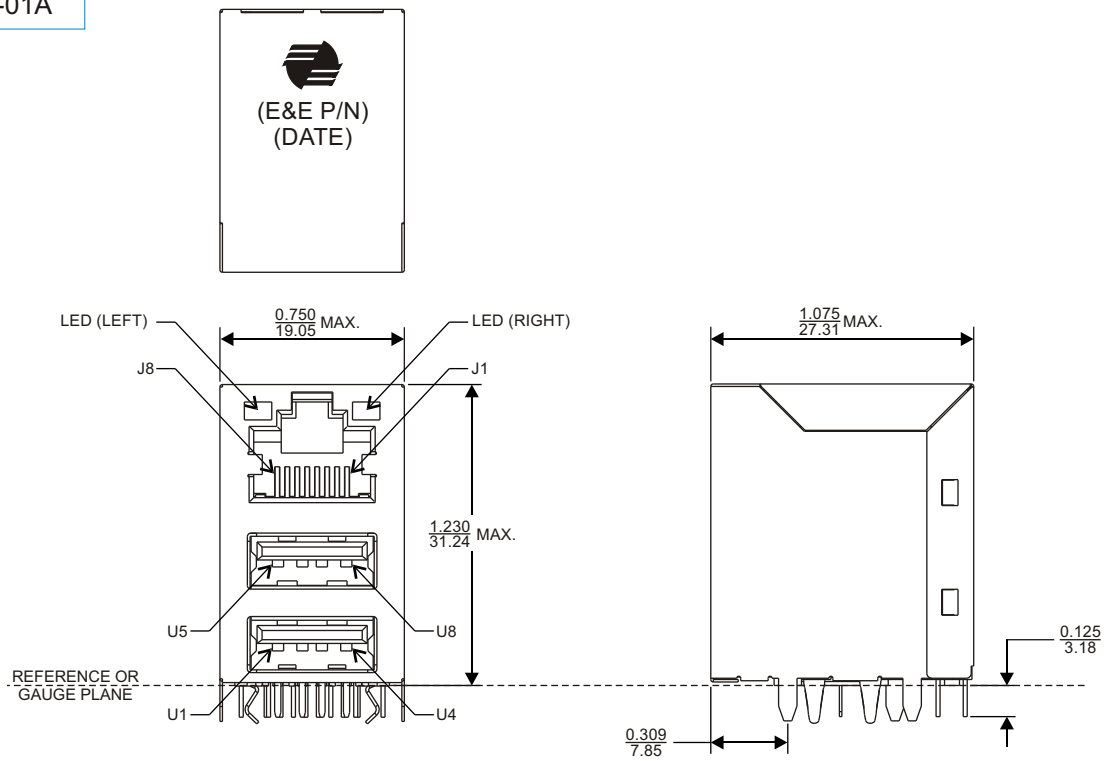
Notes:

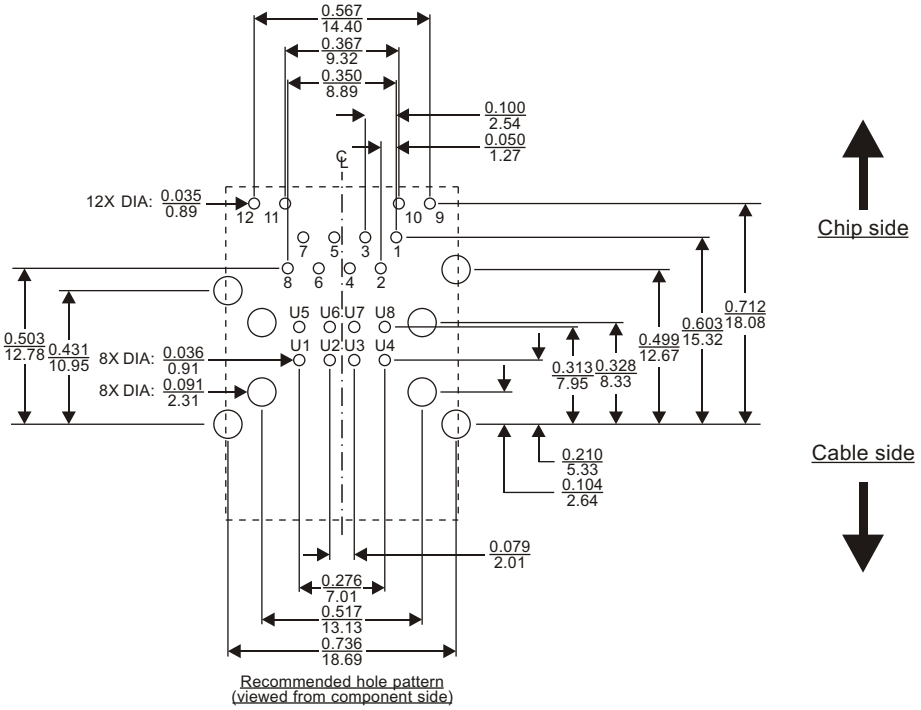
1. Ordering Information: MCR11A1GYA0-abbbc/MCR11A2GYA4-abbbc.
   - MCR11A1GYA0 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - MCR11A2GYA4 = Product Type (xxRxxxxxxxx, R respresents Internal Control Code).
   - abbb = Schematic code(H34V/H34U/H36E/H34K/K34K).
   - c = Packaging Code (No Code = NoN Tape and reel packaging, e.g. Tray Packaging).
2. For different electrical and mechanical specifications, please contact E&E Magnetic Products Limited.
3. Core location are counted from PCB (Chip) side to Cable (Media) side, where:
   "T" = Isolation transformer ; "C" = Common-mode choke ; "A" = Auto-transformer
4. LEDs (Left / Right) : "G" = Green ; "Y" = Yellow . For different LED color requirements, please contact E&E Magnetic Products Limited.
5. Schematic of H34K, K34K are suitable for Auto MDI/MDIX applications.
6. Panel tabs are optional.
7. All parts shown in this datasheet have gold plating thickness of 10 micro-inch (min.) over contact area. Advance options including 30 micro-inch (min.) and 50 micro-inch (min.) are also available.
8. Operating temperature: -40°C to +85°C.

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
Tel: (852) 2954 3333 • Fax: (852) 2954 3304

MECHANICAL DIMENSIONS

MC11A-01A





All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

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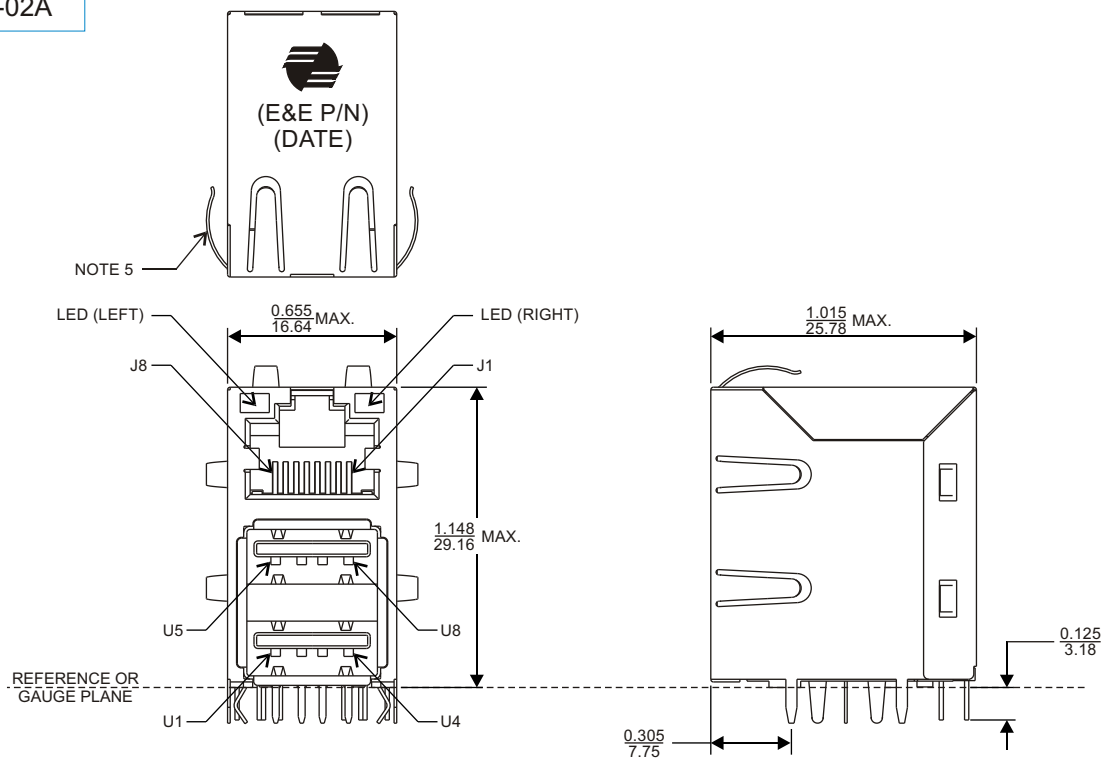
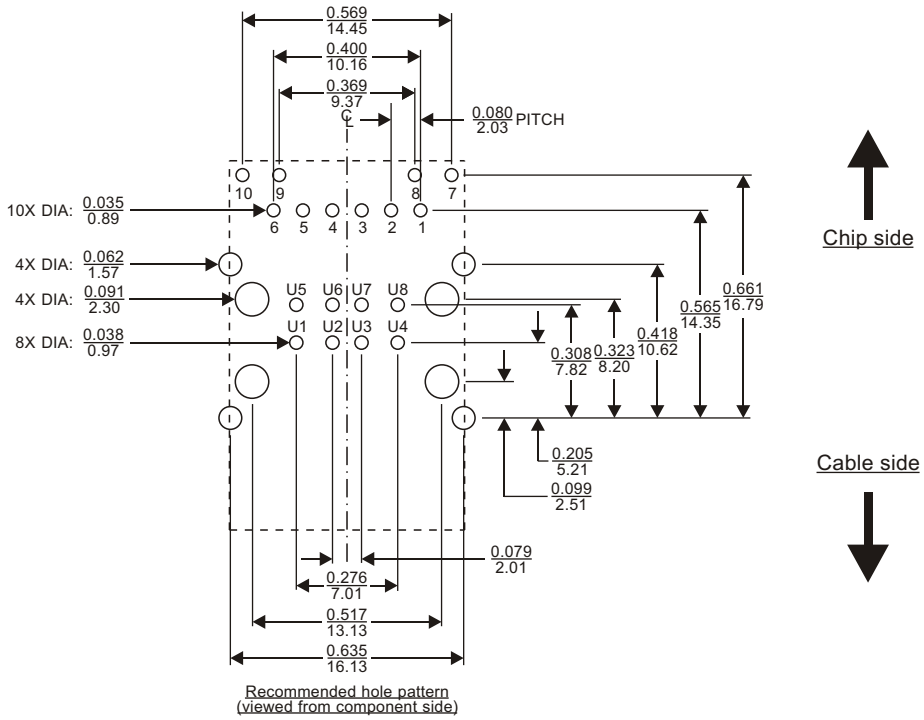
MECHANICAL DIMENSIONS

MC11A-02A



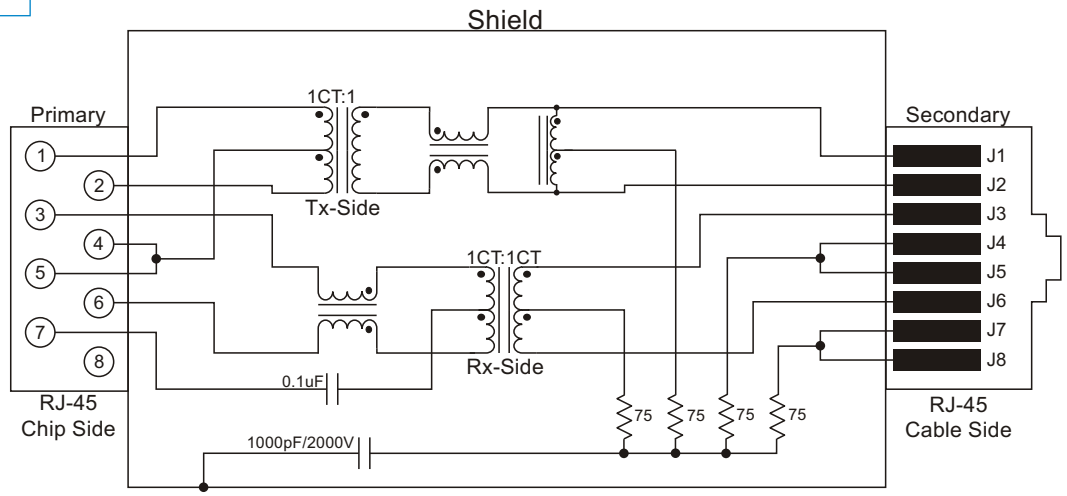


All dimensions are specified in $\frac{\text{inch}}{\text{mm}}$ with higher precedence in inch.

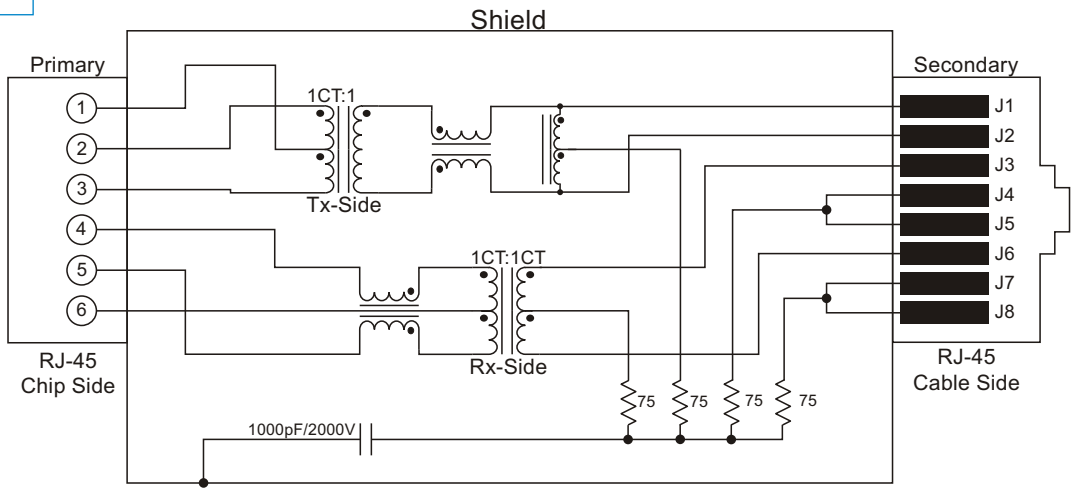
Unless otherwise specified, all tolerances are $\pm \frac{0.010}{0.25}$.

SCHEMATICS

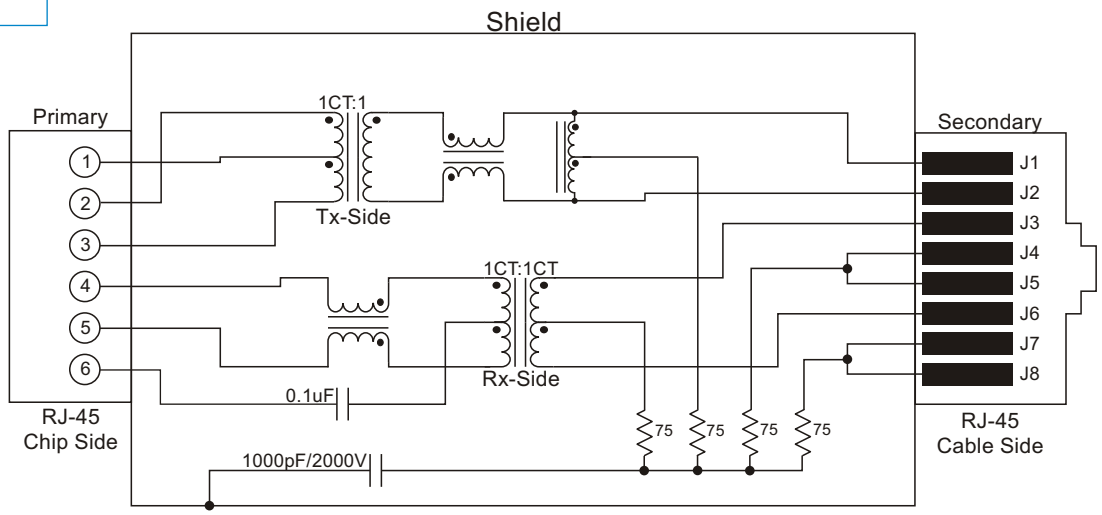
H34V



H34U



H36E



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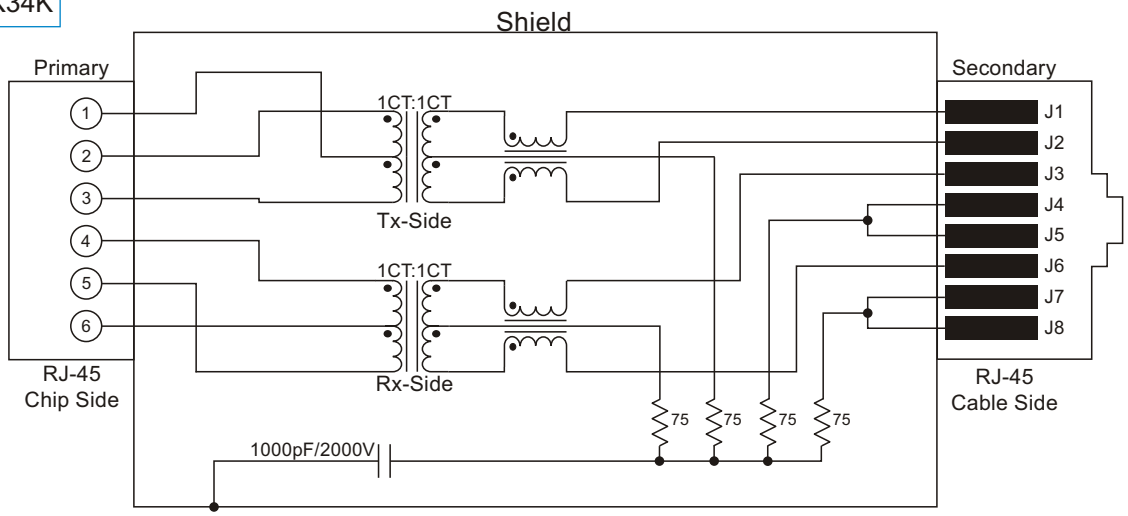
E & E Magnetic Products Limited

10/100 Base-T Applications
Combo Type, RJ-45 + 2 USB Ports

SCHEMATICS

H34K / K34K



LEDs COLOR AND POLARITY

MC11A-01A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 12	PIN 11		PIN 10	PIN 9
LED (RIGHT) ⑨ ⑩	GREEN	+	—	YELLOW	+	—
LED (LEFT) ⑪ ⑫						

LEDs COLOR AND POLARITY

MC11A-02A	LED (LEFT)			LED (RIGHT)		
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 10	PIN 9		PIN 8	PIN 7
LED (RIGHT) ⑦ ⑧	GREEN	+	—	YELLOW	+	—
LED (LEFT) ⑨ ⑩						

LED SPECIFICATION @25□C, FORWARD CURRENT = 20mA

Standard Color	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5
Yellow	590	2.1	2.5

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MATERIALS	
Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins[6]	Phosphor bronze, plated with nickel under-plating and hard gold over contact area.
PCB Pins	Copper wire which meets solderability requirements per MIL-STD-202, method 208.

FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER
1/F., Harbour View 1, No.12 Science Park East Avenue,
Phase II, Hong Kong Science Park, Shatin, N.T.
Hong Kong
Tel: (852) 2954 3333 Fax: (852) 2954 3304
Email: eempl@eleceltek.com
Website: http://www.eleceltek.com / www.eemagnetic.com

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E & E Magnetic Products Limited

Part Number Index

Magnetic Integrated Connector Modules

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong
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Part Number Index

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