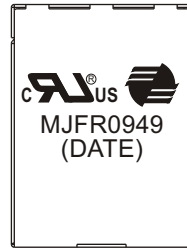


SAFETY CRITICAL PART		REVISIONS				
MATERIAL LIST IS REQ'D'		YES	REV.	DESCRIPTION	ECN NO.	DATE
AGENCY FILE / CERTIFICATE NUMBER		01	FIRST RELEASE		N/A	05/07/14
UL 1863	E230849					
CAN/CSA-C22.2 NO.182-4-M90.1990	E230849					

**PAGE 4 IS FOR INTERNAL ONLY**

TITLE  
**MODULAR JACK, RJ45, SINGLE,  
 TH, 100BASE-T(PoE), NIC**

<p align="center"><b><u>WARNING !</u></b></p> <p>ALL SHEETS OF THIS DOCUMENT ARE CONTROLLED DOCUMENTATION AND ARE NOT TO BE RELEASED OUTSIDE OF E&amp;E OR ITS SUB-CONTRACTORS WITHOUT AUTHORIZATION.</p>	<p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCH/mm.</p> <p align="center"><u>TOLERANCE ARE:</u></p> <table border="0"> <tr> <td>INCH</td> <td>mm</td> <td>ANGLE</td> </tr> <tr> <td>.XXX ± .005</td> <td>.XX ± .13</td> <td>X.X ± 0.3</td> </tr> <tr> <td>.XX ± .02</td> <td>.X ± .5</td> <td>X. ± 1</td> </tr> </table>	INCH	mm	ANGLE	.XXX ± .005	.XX ± .13	X.X ± 0.3	.XX ± .02	.X ± .5	X. ± 1	<b>APPROVALS</b>		<b>DATE</b>	 <b>E &amp; E Magnetic Products Ltd.</b>
		INCH	mm	ANGLE										
		.XXX ± .005	.XX ± .13	X.X ± 0.3										
		.XX ± .02	.X ± .5	X. ± 1										
		DRAWN BY		<b>S.T. HUANG</b>	05/07/14	DRAWING NO./MODEL <p align="center"><b>MJFR0949</b></p>	REV <p align="center"><b>01</b></p>							
PROJ. ENG		<b>J.J. LI</b>	05/07/14											
APPROVED BY		<b>J.J. LI</b>	05/07/14											
Q.A.		<b>D. LUO</b>	05/07/14											
SCALE			<b>DO NOT SCALE</b>	PAGE	1	OF	4							



Marking detail

Chip side

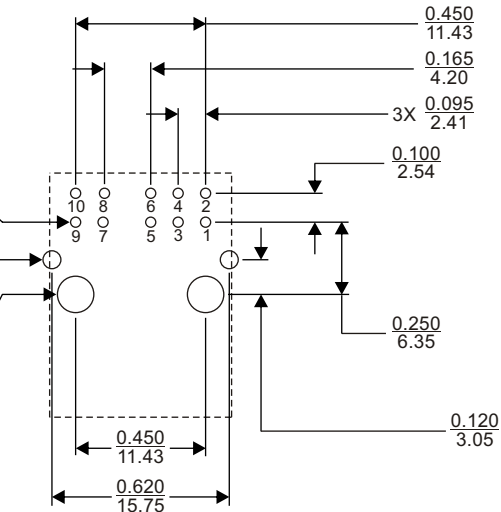


10X DIA:  $\frac{0.035}{0.89}$

2X DIA:  $\frac{0.062}{1.57}$

2X DIA:  $\frac{0.130}{3.30}$   $\begin{matrix} +0.002 \\ -0.000 \\ +0.05 \\ -0.00 \end{matrix}$

Cable side



Recommended hole pattern viewed from component side

$\frac{0.855}{21.72}$  MAX.

$\frac{0.555}{14.10}$  MAX.

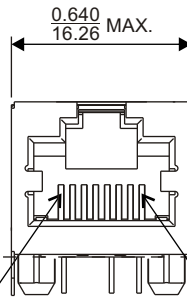
$\frac{0.425}{10.80}$

$\frac{0.125}{3.18}$

REFERENCE OR GAUGE PLANE

J8

J1



NOTES:

1. DIMENSIONS ARE SPECIFIED IN  $\frac{\text{INCHES}}{\text{mm}}$  WITH HIGHER PRECEDENCE IN INCHES.
2. UNLESS OTHERWISE SPECIFIED, ALL TOLERANCE ARE  $\pm \frac{0.010}{0.25}$ .
3. "(DATE)" INCLUDES AT LEAST THE MANUFACTURING DATE CODE (IN YYWW FORMAT) PLUS TWO CHARACTER COUNTRY CODE.
4. 10 MICRO-INCH (0.25  $\mu\text{m}$ ) MIN. THICK GOLD PLATING OVER CONTACT AREA.
5. RoHS COMPLIANT PER EU DIRECTIVE 2011/65/EU (WITHOUT EXEMPTION OF SOLDER CONTENT).

MECHANICAL OUTLINE



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01

SCALE

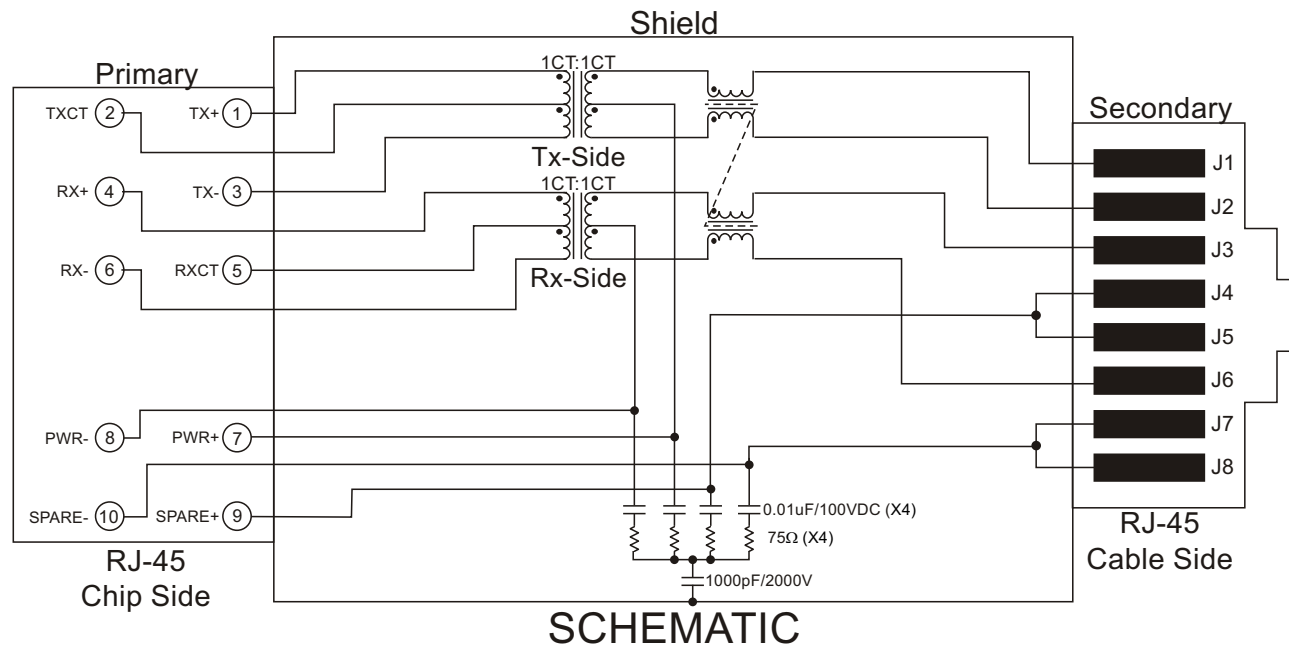
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**ELECTRICAL SPECIFICATION @25°C:**

PARAMETERS	UNIT	TX-SIDE	RX-SIDE
Turns Ratio (Primary):(Secondary)	-	1CT:1CT ± 3%	1CT:1CT ± 3%
Polarity (Primary):(Secondary)	-	Per Schematic	Per Schematic
Inductance, Ls@100kHz, 0.1Vrms, 8mADC	uH	350 Min	350 Min
Insertion Loss @0.1-100MHz	dB	1.2 Max	1.2 Max
Return Loss @1-30MHz	dB	16.0 Min	16.0 Min
Return Loss @40MHz	dB	14.0 Min	14.0 Min
Return Loss @50MHz	dB	13.0 Min	13.0 Min
Return Loss @60-80MHz	dB	12.0 Min	12.0 Min
CMRR @32MHz (for reference only)	dB	42.0 Min	42.0 Min
CMRR @62MHz (for reference only)	dB	37.0 Min	37.0 Min
CMRR @100MHz (for reference only)	dB	33.0 Min	33.0 Min
Crosstalk @0.1-100MHz (TX<=>RX) (for reference only)	dB	33.0 Min	
HIPOT (Primary):(Secondary)	Vrms	1500 Min	1500 Min

6. OPERATING TEMPERATURE : 0°C TO +70°C.

7. BALANCED DC LINE CURRENT CAPABILITY (J1,J2-7) & (J3,J6-8) & (J4,J5-9) & (J7,J8-10) : 350mADC MAXIMUM.

**E & E Magnetic Products Ltd.**

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