






-  Compliant with IEEE802.3 standard including 350μH OCL with 8mA DC Bias
-  Compliant with USB 2.0 standards and Cat5 fast Ethernet industry standards.
-  1500Vrms isolation voltage per IEEE802.3
-  Enhanced performance on EMI suppression with metal shielding
-  Operating temperature 0°C to +70°C



**GENERAL ELECTRICAL SPECIFICATION @25°C**

Insertion Loss (dB Max)		Return Loss <sup>1</sup> (dB Min)		CMRR (dB Min)	Crosstalk <sup>1</sup> (dB Min)	Hipot (Vrms)
0.1-100MHz	100-125 MHz	0.5-40MHz	40-100MHz	0.1-100MHz	0.1-100MHz	
1.0	1.2	18.0	12-20Log(F/80)	30.0	33-20Log(F/50)	1500

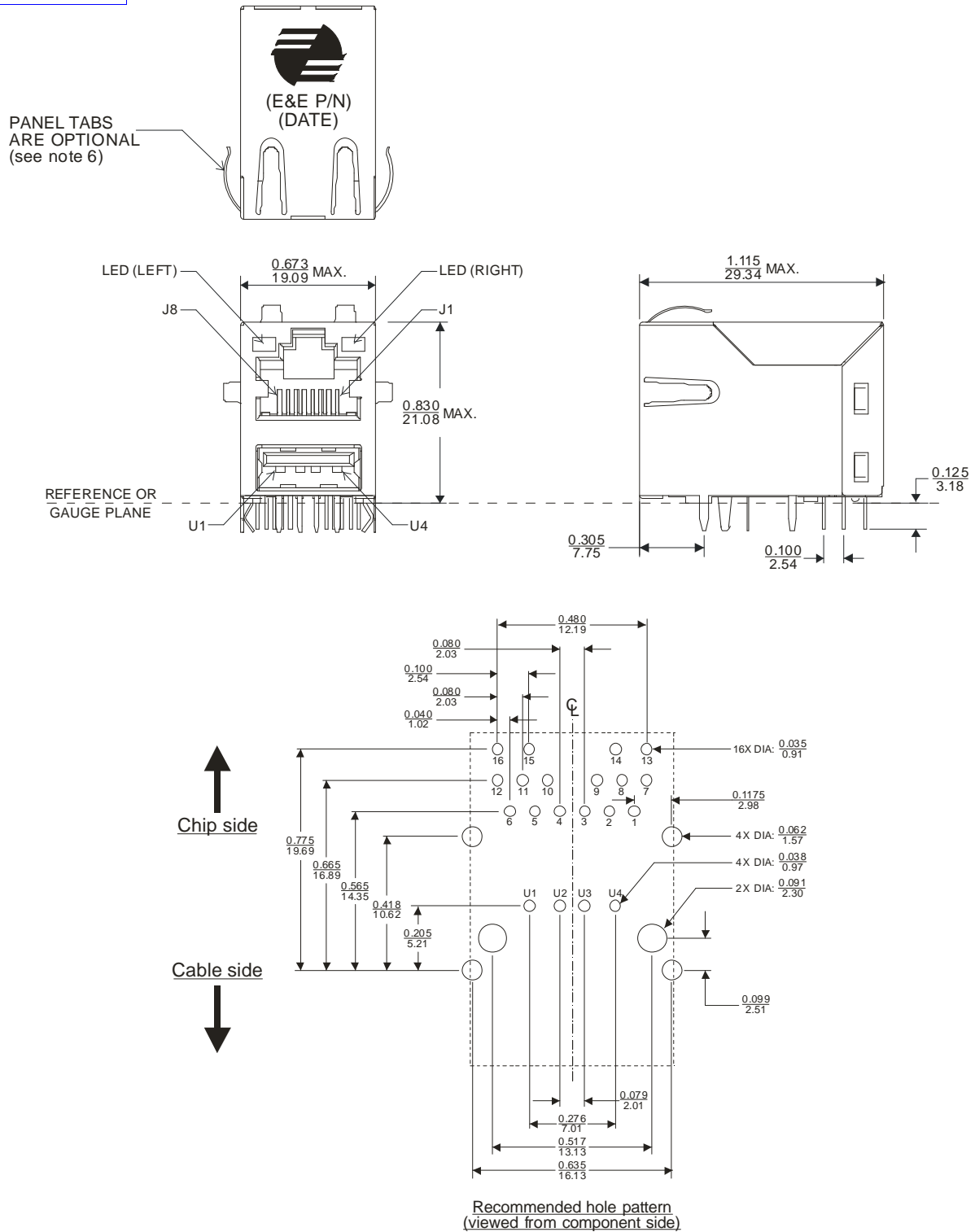
**PART NUMBER TABLE**

Part Number <sup>2</sup>	Turn Ratio (±3%) (Chip: Cable)	Configuration <sup>3</sup>	Components Build-in <sup>4</sup>	LED <sup>5</sup> (Left / Right)	Platform	Mechanical Package	Schematic
MC-11B2GGA4-G709	1CT:1CT	CT	BST-C	G / G	1X1	MJ11B-01A	G709

**NOTE:**

1. "F" represents the test frequency specified in MHz.
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.
5. BST-C = Bob Smith Termination with 2000V High Voltage Capacitor.

MJ11B-01A

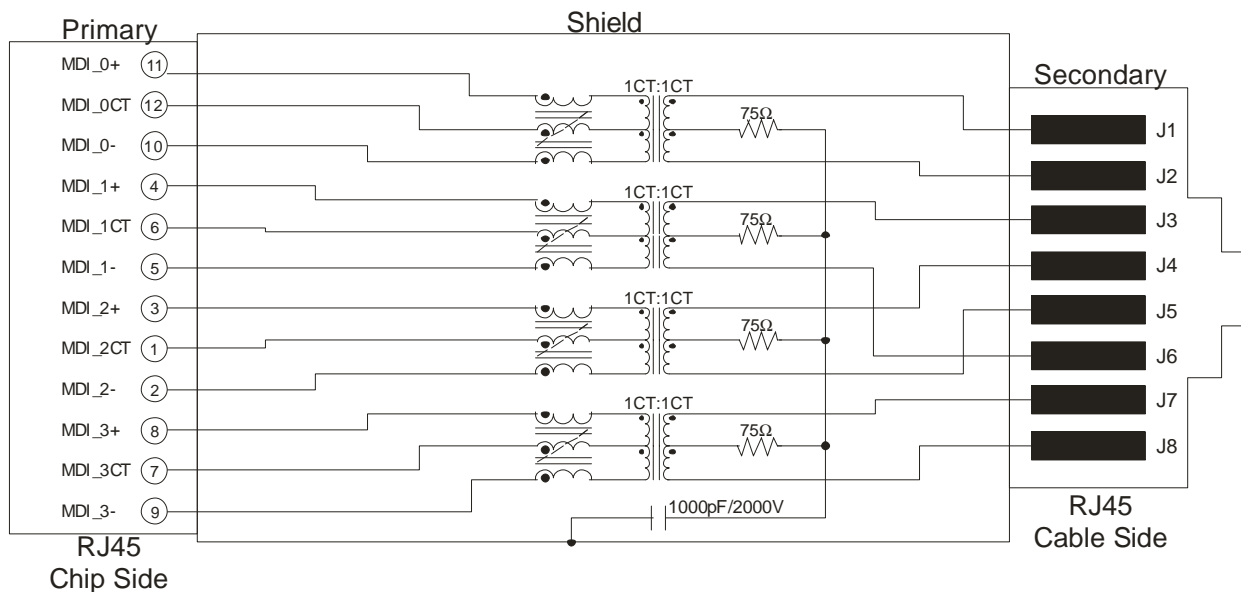


All dimensions are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.

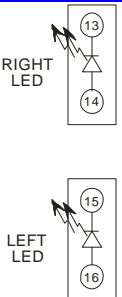
Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .

**SCHEMATIC**

G709



**LEDs COLOR AND POLARITY**

MJ11B-01A	LED (LEFT)		LED (RIGHT)			
	COLOR	POLARITY		COLOR	POLARITY	
		PIN 14	PIN 13		PIN 15	PIN 16
	GREEN	+	-	GREEN	-	+

**LED SPECIFICATION @25°C, Forward Current=20mA**

Standard Color <sup>7</sup>	Typical Wavelength (nm)	Forward Voltage (volt)	
		Typical	Maximum
Green	565	2.2	2.5



MATERIALS	
Housing	Consist of thermoset & thermoplastic materials, all of them are UL 94-V0 rated.
Contact Pins <sup>8,9</sup>	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
Shield	Nickel-plated copper alloy.

**NOTE:**

6. For different panel tab configurations, please contact E&E Magnetic Products Limited.
7. For different LED color, please contact E&E Magnetic Products Limited.
8. For All part numbers shown in this datasheet have gold plating thickness 10 micro-inches minimum. Advance options including 30 micro-inches minimum & 50 micro-inches minimum are also available.
9. Minimum 500 mating / un-mating cycles. Higher durability option is available upon request.
10. Lead(Pb)-free & Lead(Pb)-reduced versions are available upon request.

**FOR MORE INFORMATION, PLEASE CONTACT**

**HEADQUARTER**

Unit B10, 3/F., Merit Industrial Centre,  
94 Tokwawan Road, Kowloon,  
Hong Kong  
Tel: (852) 2954 3333  
Fax: (852) 2954 3304  
Email: eempl@eleceltek.com  
Website: <http://www.eleceltek.com>

Information herein is for reference only and subject to change without notice. It does not constitute any representation, warranty or commitment of the company in respect of the products in any aspect. All logos, brands and product names mentioned herein are trademarks or registered trademarks of their respective owners. The company does not assume any liability arising out of the application or use of any product or circuit described herein. Copyrights 2004, E & E Magnetic Products Limited.