

# PULSEJACK™

## 1xN Giggle-Up10







[www.pulseeng.com](http://www.pulseeng.com)

### Description:




10/100/1000 Base-T RJ45 1xN Tab-UP Integrated Connector Module (ICM) with or without LEDs, designed to support such applications as: SOHO (ADSL modems), LAN-on-Motherboard (LOM), Hub and Switches.



### Features and Benefits:

-  RoHS-5 peak wave solder temperature rating 235°C
-  RoHS-6 peak wave solder temperature rating 260°C
-  1xN Tab-UP 10-pin RJ45 with internal magnetics
-  Suitable for CAT 5 & 6 Fast Ethernet Cable or better UTP

### Electrical Performance Summary:

-  Meets IEEE 802.3 specification
-  350µH minimum OCL with 8mA bias current
-  High performance for maximum EMI suppression

### Electrical Specifications @ 25°C — Operating Temperature 0°C to +70°C

RoHS-5 <sup>2</sup> Compliant Part No.	RoHS-6 <sup>3</sup> Compliant Part No.	Tab Option	LEDs <sup>1</sup> L/R	Insertion Loss TX/RX (dB TYP)	Return Loss (dB TYP) 100Ω (±15Ω)				Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms MIN)  @60Hz 1 MIN
					1-100 MHz	1-10 MHz	30 MHz	60-80 MHz	1-10 MHz	30-60 MHz	60-100 MHz	1-125 MHz	125-500 MHz	
JG0-0023 (1x2)	JG0-0023NL (1x2)	UP	G/G	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	1500	
JG0-0024 (1x2)	JG0-0024NL (1x2)	UP	G/G	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	1500	
JG0-0025 (1x4)	JG0-0025NL (1x4)	UP	G/G	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	1500	
JG0-0026 (1x4)	JG0-0026NL (1x4)	UP	G/G	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	1500	
JG0-0027 (1x6)	JG0-0027NL (1x6)	UP	G/G	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	1500	
JG0-0028 (1x8)	JG0-0028NL (1x8)	UP	G/G	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	1500	

#### NOTES:

1. LEDs Left/Right: **G** = green.
2. RoHS-5 - Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Product contains lead in applications considered as solders.
3. RoHS-6 - Product does not contain 5 out of the 6 banned substances specified in the RoHS directive. Some internal connections may contain lead in high temperature solder (solder alloys containing more than 85% lead).

### RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JG Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

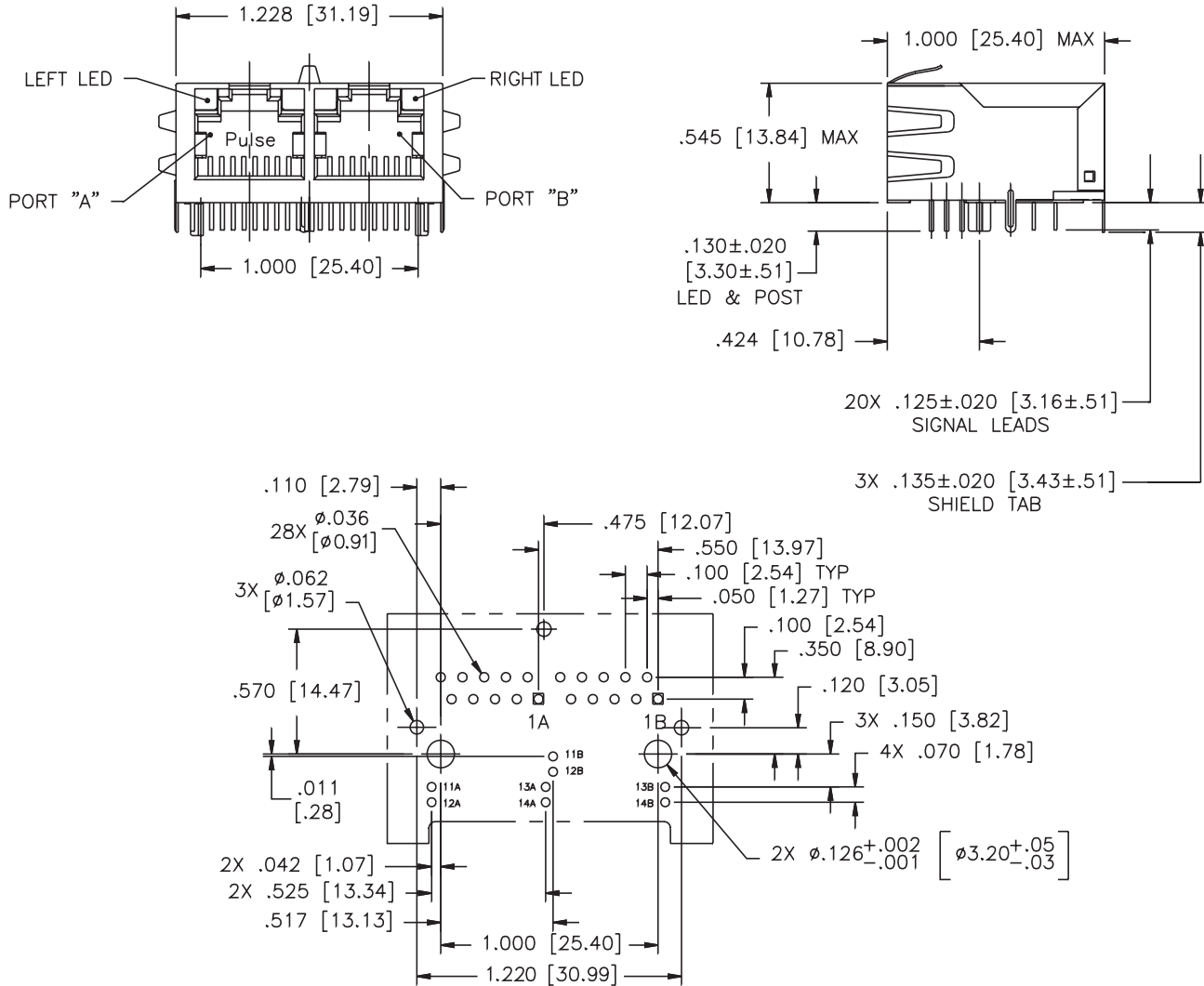
### RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL <sup>2</sup> Rating
	Material	Finish	Material	Plating Area	Solder Area <sup>3</sup>	Material	Specification	
JG Series	Brass	20-40µ inches thick nickel over Brass	Phosphor Bronze	30µ inches gold over 30-80µ inches nickel	75-300µ inches tin-lead over 75-300µ inches nickel	Thermoplastic	UL 94 V-0	1

- Notes: 1. Connector dimensions comply with FCC part 68 dimension requirements. 2. MSL = Moisture Sensitivity Level rating from 1 to 5 (highest rating = 1, lowest rating = 5). 3. NL parts are tin matte finish over nickel.

### Mechanical

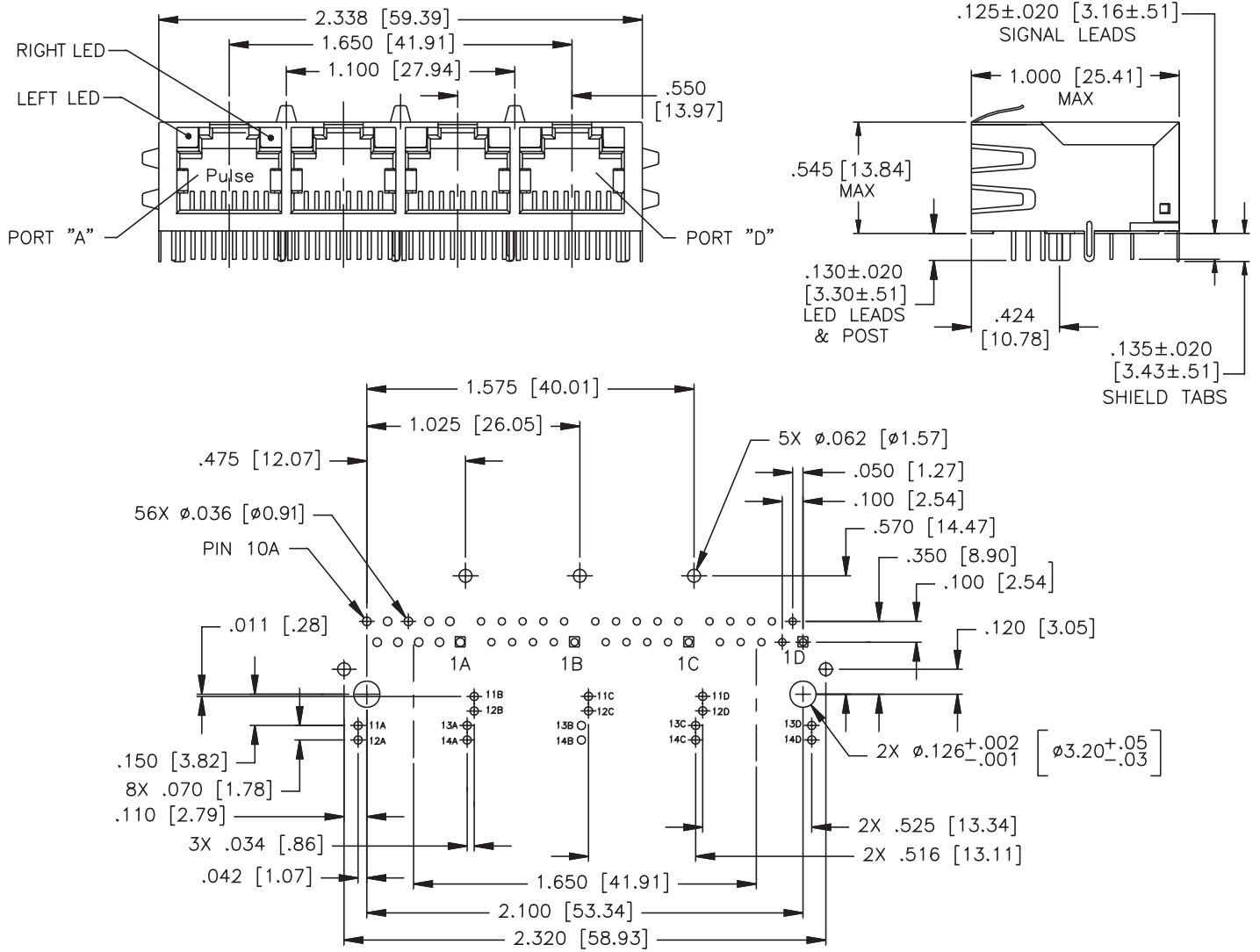
JG0-0023/24



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE  
PCB LAYOUT DIMENSIONS TO BE ±.003 UNLESS OTHERWISE SPECIFIED

### Mechanical

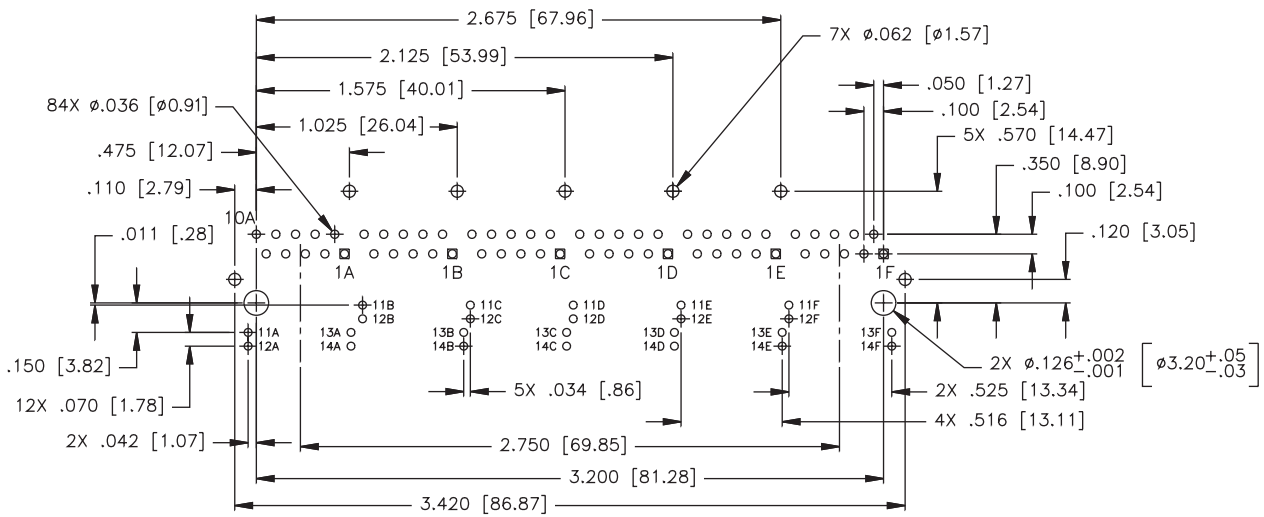
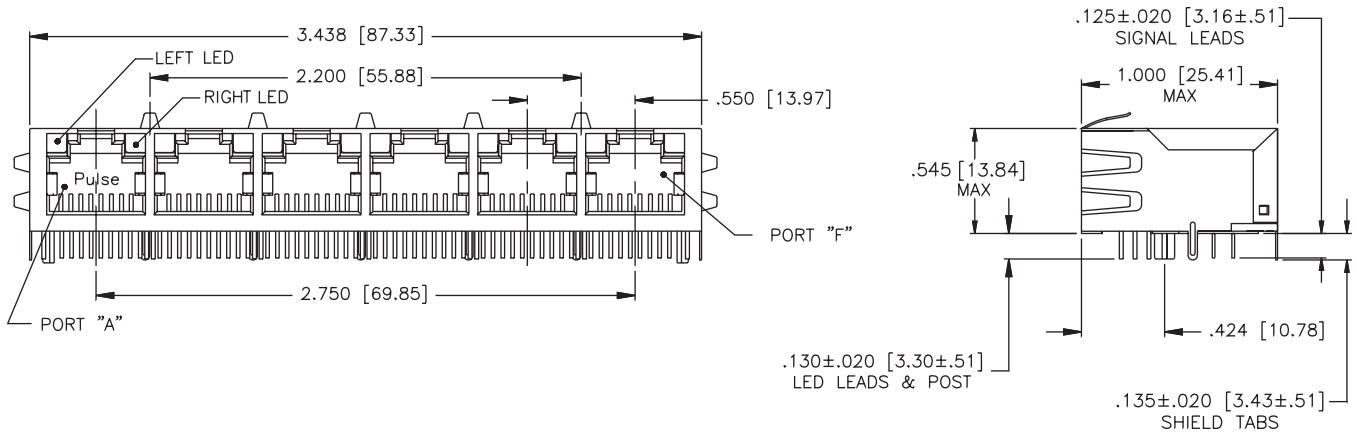
**JG0-0025/26**



PC Board Layout Component Side Shown  
PCB LAYOUT DIMENSIONS TO BE ±.003 UNLESS OTHERWISE SPECIFIED

### Mechanical

JG0-0027

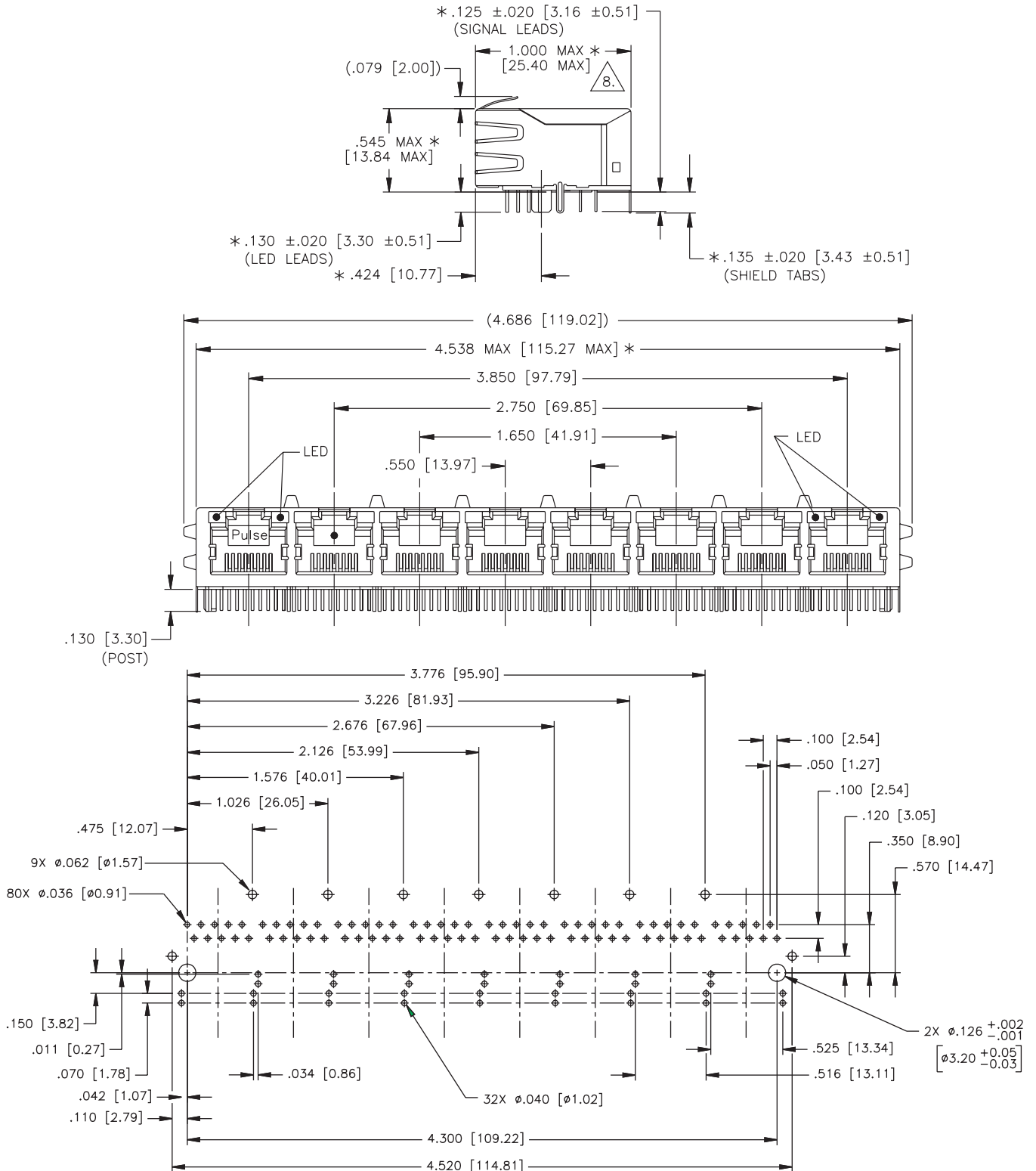


PC Board Layout Component Side Shown  
PCB LAYOUT DIMENSIONS TO BE  $\pm .003$  UNLESS OTHERWISE SPECIFIED



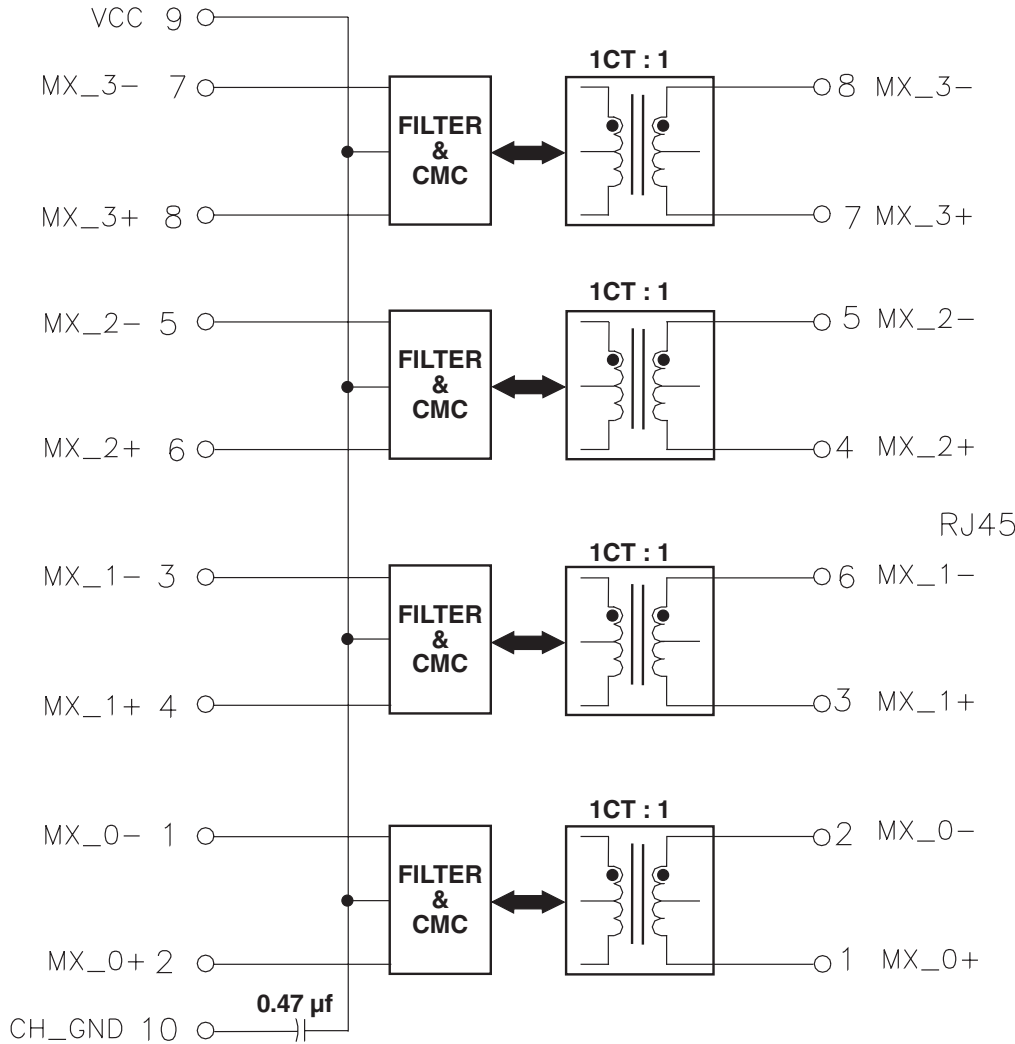
### Mechanical

JG0-0028

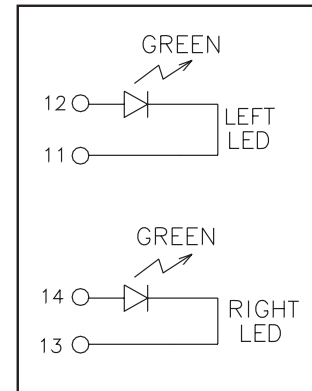


### Schematic

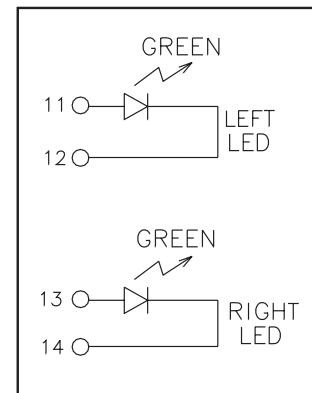
**JG0-002X**



**JG0-0024**  
**JG0-0026**  
**JG0-0027**  
**JG0-0028**



**JG0-0023**  
**JG0-0025**



### For More Information:

**Pulse Worldwide Headquarters**

12220 World Trade Drive  
San Diego, CA 92128  
U.S.A.  
[www.pulseeng.com](http://www.pulseeng.com)  
TEL: 858 674 8100  
FAX: 858 674 8262

**Pulse Northern Europe**

3 Huxley Road  
Surrey Research Park  
Guildford, Surrey GU2 5RE  
United Kingdom  
TEL: 44 1483 401700  
FAX: 44 1483 401701

**Pulse Southern Europe**

Zone Industrielle  
F-39270  
Orgelet  
France  
TEL: 33 3 84 35 04 04  
FAX: 33 3 84 25 46 41

**Pulse China Headquarters**

No. 1  
Industrial District  
Changan, Dongguan  
China  
TEL: 86 769 85538070  
FAX: 86 769 85538870

**Pulse North China**

Room 1503  
XinYin Building  
No. 888 YiShan Road  
Shanghai 200233  
China  
TEL: 86 21 54643211/2  
FAX: 86 21 54643210

**Pulse South Asia**

150 Kampong Ampat  
#07-01/02  
KA Centre  
Singapore 368324  
TEL: 65 6287 8998  
FAX: 65 6280 0080

**Pulse North Asia**

No. 26  
Kao Ching Road  
Yang Mei Chen  
Taoyuan Hsien  
Taiwan, R. O. C.  
TEL: 886 3 4641811  
FAX: 886 3 4641911

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners.  
© Copyright, 2006. Pulse Engineering, Inc. All rights reserved.