

PULSEJACK™

1xN Giggle-Up10



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 ² Compliant Part No.	RoHS-6 ³ Compliant Part No.	Tab Option	LEDs ¹ 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.

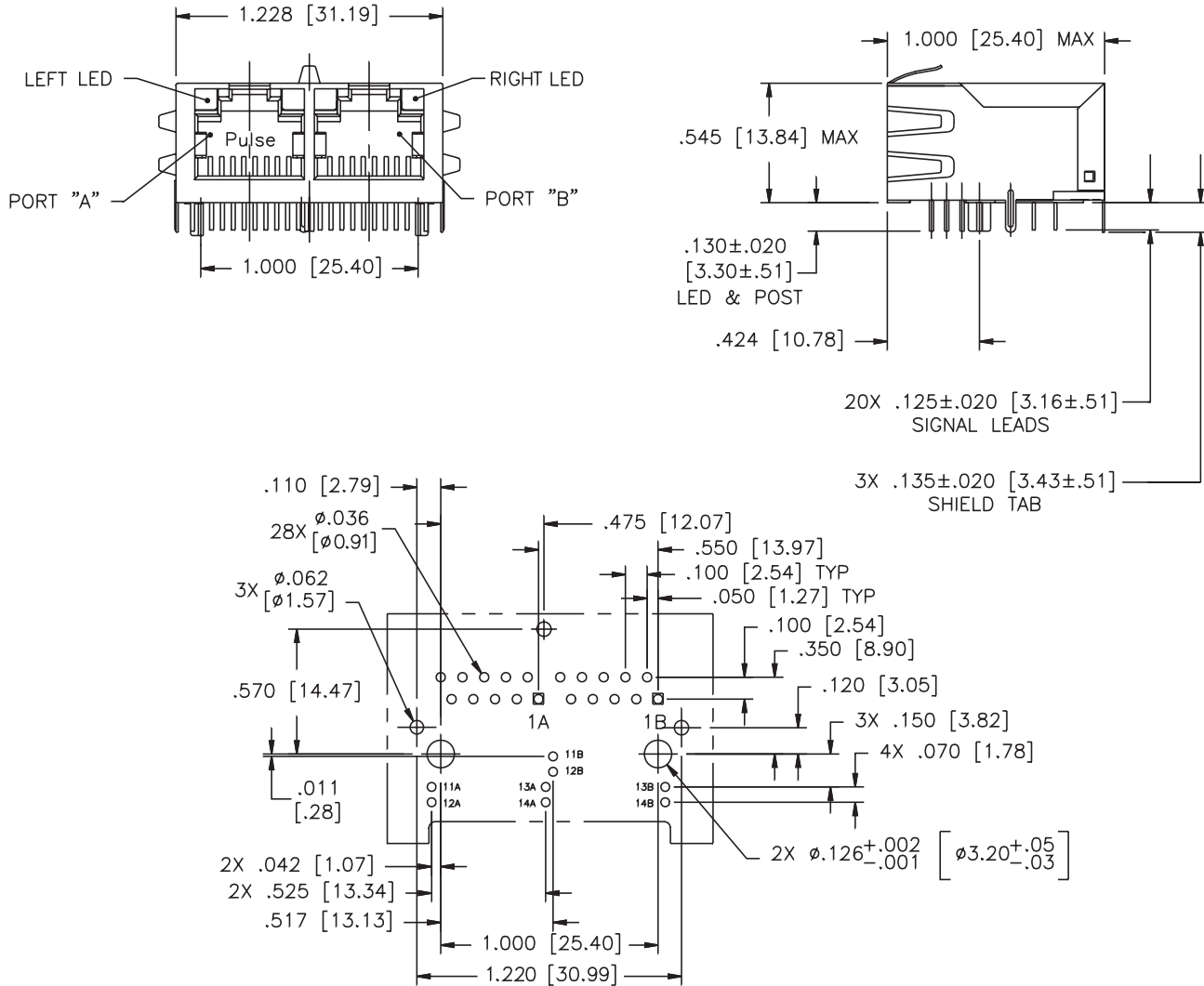
RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL ² Rating
	Material	Finish	Material	Plating Area	Solder Area ³	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

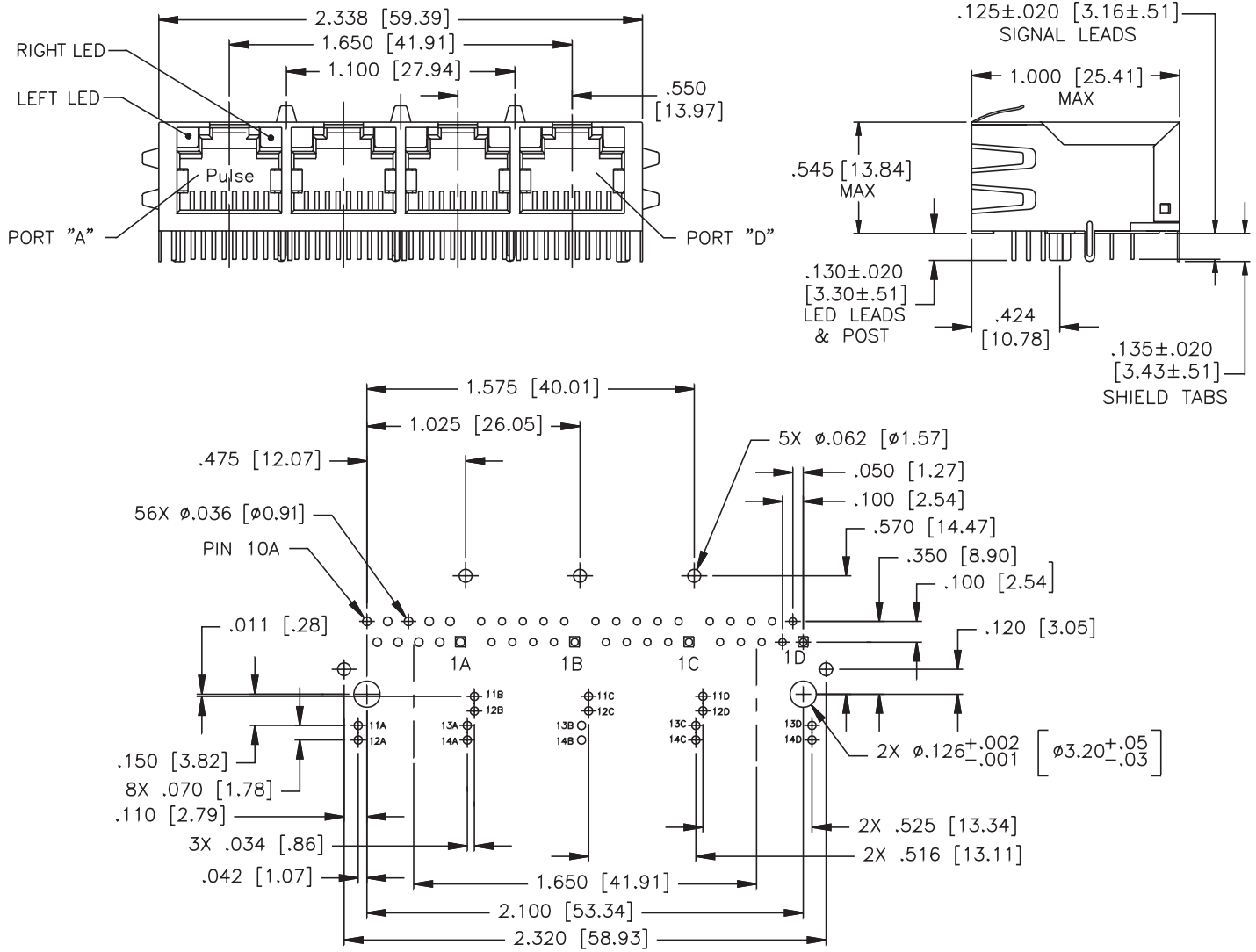
JG0-0023/24



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

Mechanical

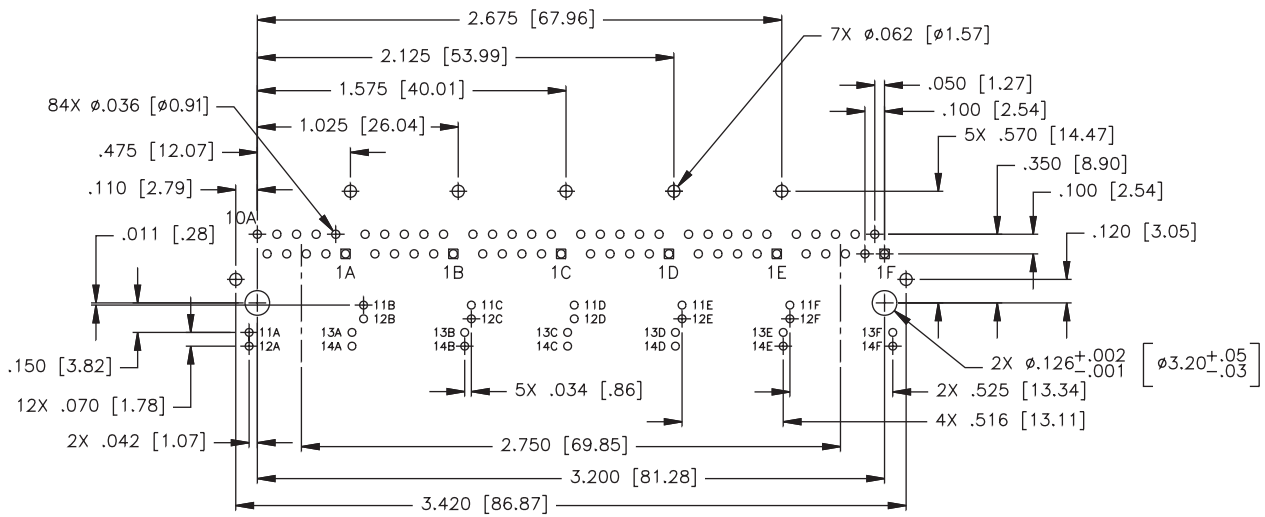
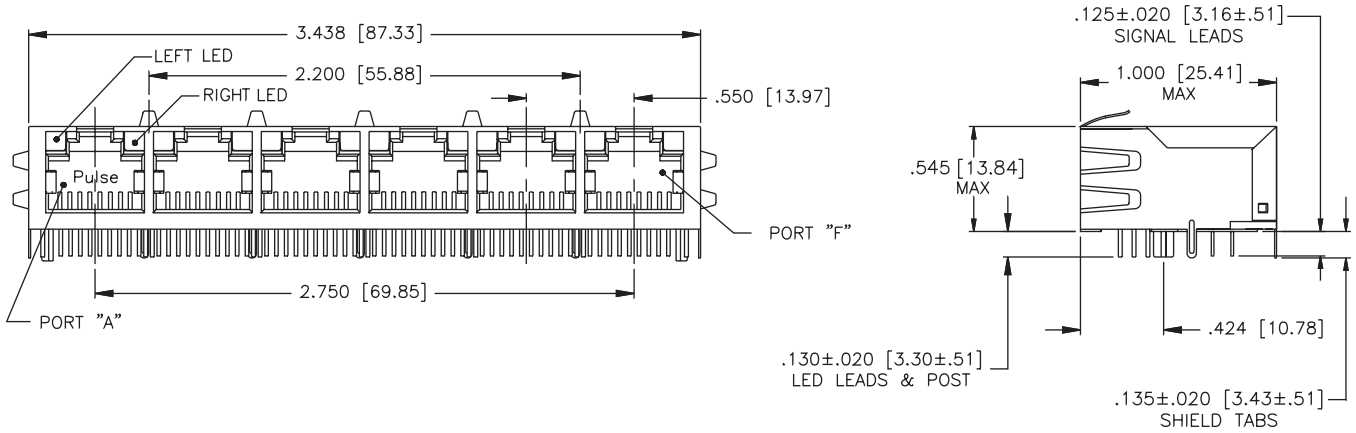
JG0-0025/26



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

Mechanical

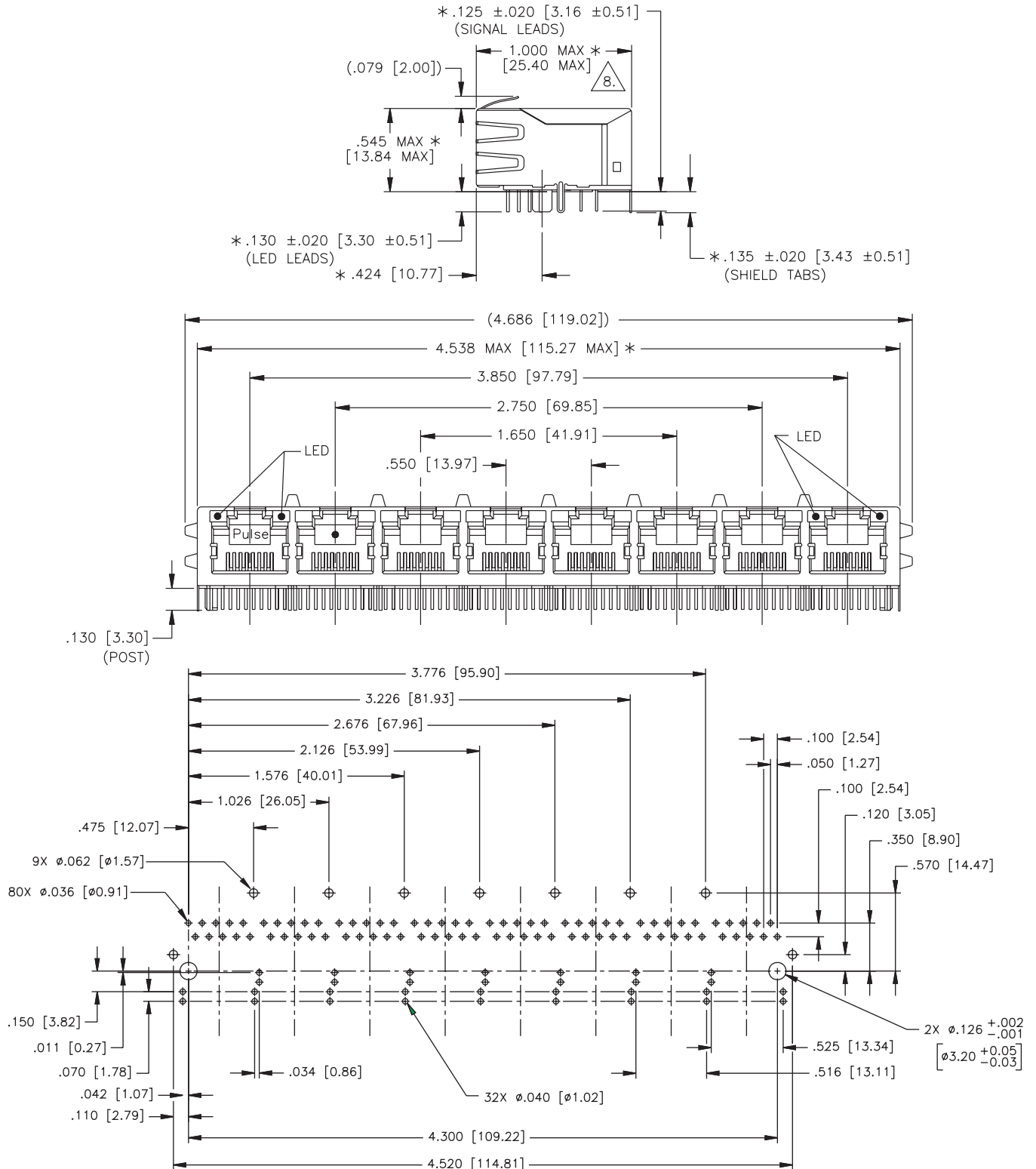
JG0-0027



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

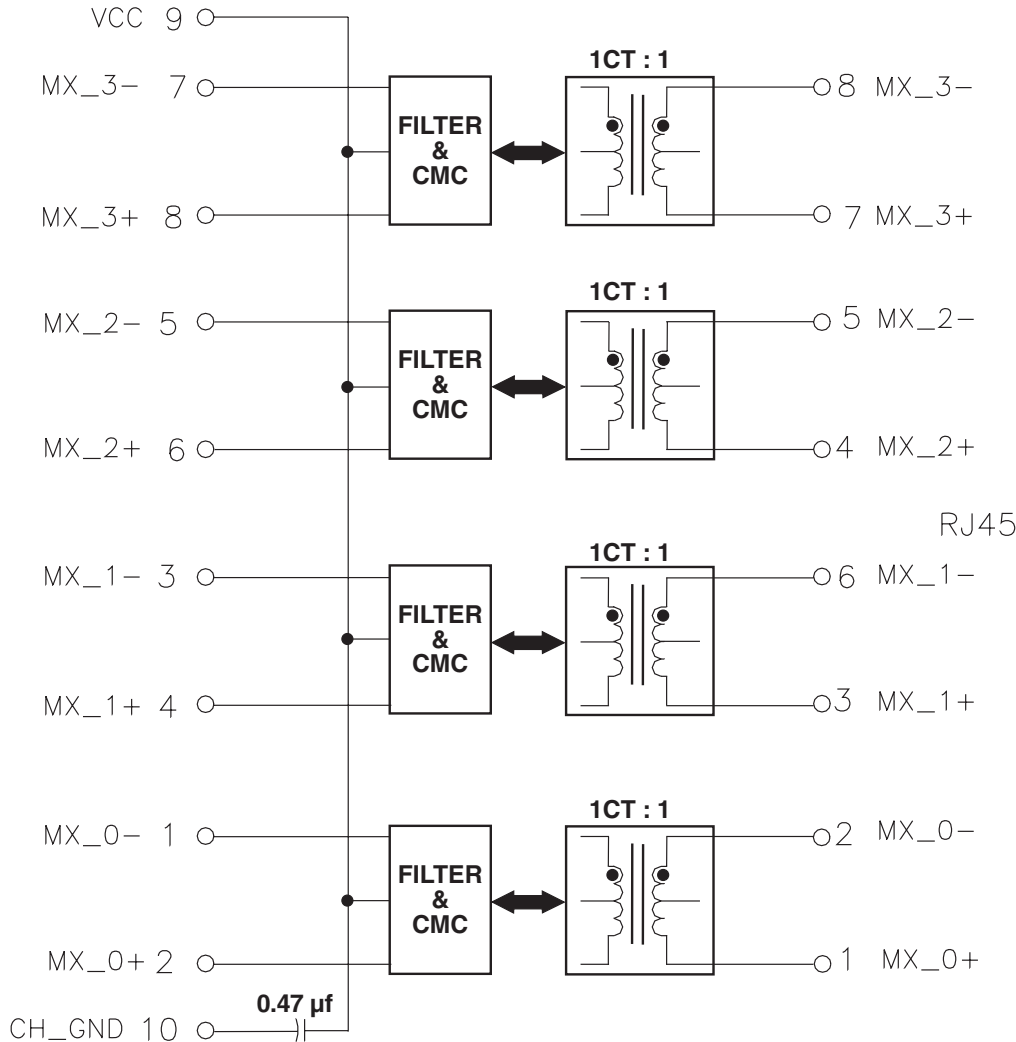
Mechanical

JG0-0028

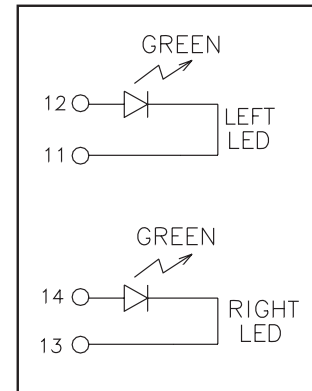


Schematic

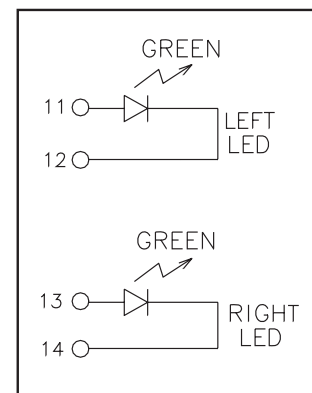
JG0-002X



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
 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.