

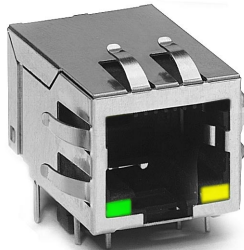
# PULSEJACK™

## 1x1 Tab-DOWN RJ45





### Description:

10/100 Base-TX RJ45 1x1 Tab-DOWN with LEDs 8-pin (J0 series) integrated magnetics connector (ICM), designed to support applications, such as SOHO (ADSL modems), LAN-on-Motherboard (LOM), Hub and Switches.






J0006D21BNL shown

### Features and Benefits:

-  RoHS peak wave solder temperature rating 260°C
-  Suitable for CAT 5 & 6 Fast Ethernet Cable or better UTP

### Electrical Performance Summary:

-  Meets or exceeds IEEE 802.3 standard for 100Base-T
-  350 µH minimum OCL with 8mA bias current
-  Minimum 1500Vrms isolation per IEEE 802.3 requirement

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

RoHS Compliant Part Number	Turns Ratios		Mech. Drawing	EMI Fingers	LEDs <sup>1</sup> (L/R)	Insertion Loss (dB TYP)	Return Loss (dB TYP) 100W ±15W					Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (VDC)
	TX	RX					1-65 MHz	1-10 MHz	10-30 MHz	30-60 MHz	60-80 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-50 MHz	50-150 MHz	
J0006D01BNL	1CT:1	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0006D21NL	1CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0006D21BNL	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0011D01NL	1CT:1	1CT:1	C	No	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0011D01BNL	1CT:1	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0011D21NL	1CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0011D21BNL	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0011D21ENL	1CT:1	1CT:1	B	YES	G/G	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0012D21NL	1CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0018D21NL	1CT:1.414	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0018D21ENL	1CT:1.414	1CT:1	B	YES	G/G	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0024D21NL	1CT:2	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0024D21BNL	1CT:2	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D01NL	1CT:1	1CT:1	D	No	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D01BNL	1CT:1	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D01ENL	1CT:1	1CT:1	A	No	G/G	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D01FNL <sup>2</sup>	1CT:1	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D21NL	1CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D21BNL	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D21ENL	1CT:1	1CT:1	B	YES	G/G	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D21FNL <sup>2</sup>	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D21GNL <sup>3</sup>	1CT:1	1CT:1	B	YES	YG/G	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0033D21NL	1.25CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0035D21BNL	1CT:1	1CT:1	F	YES	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0073D01BNL	1CT:2.5	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	

Notes: 1. LEDs Left/Right: G=green, Y=yellow, N/A=none, YG=Bi-color LED Yellow Green. 2. LEDs with internal resistor. 3. Bi-color Left LED.

### RJ45 Durability Testing Rating

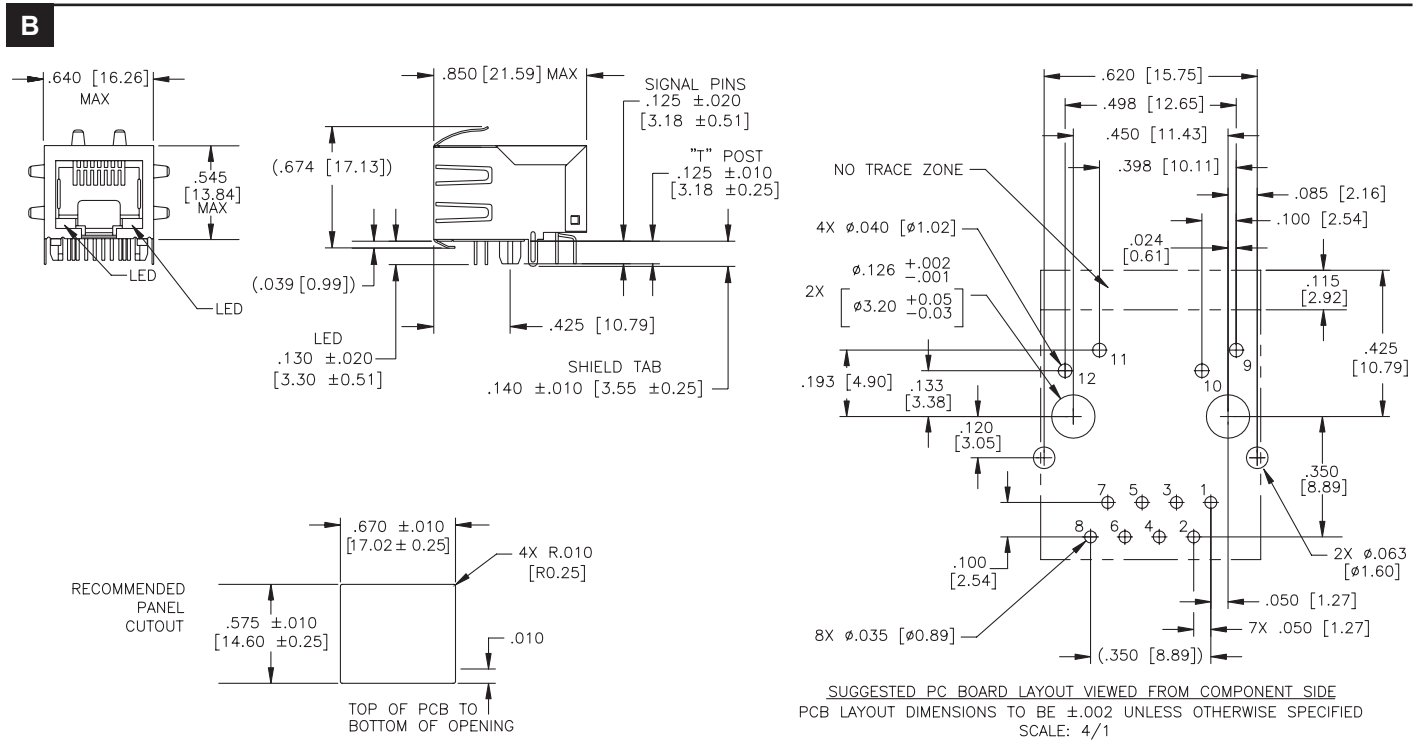
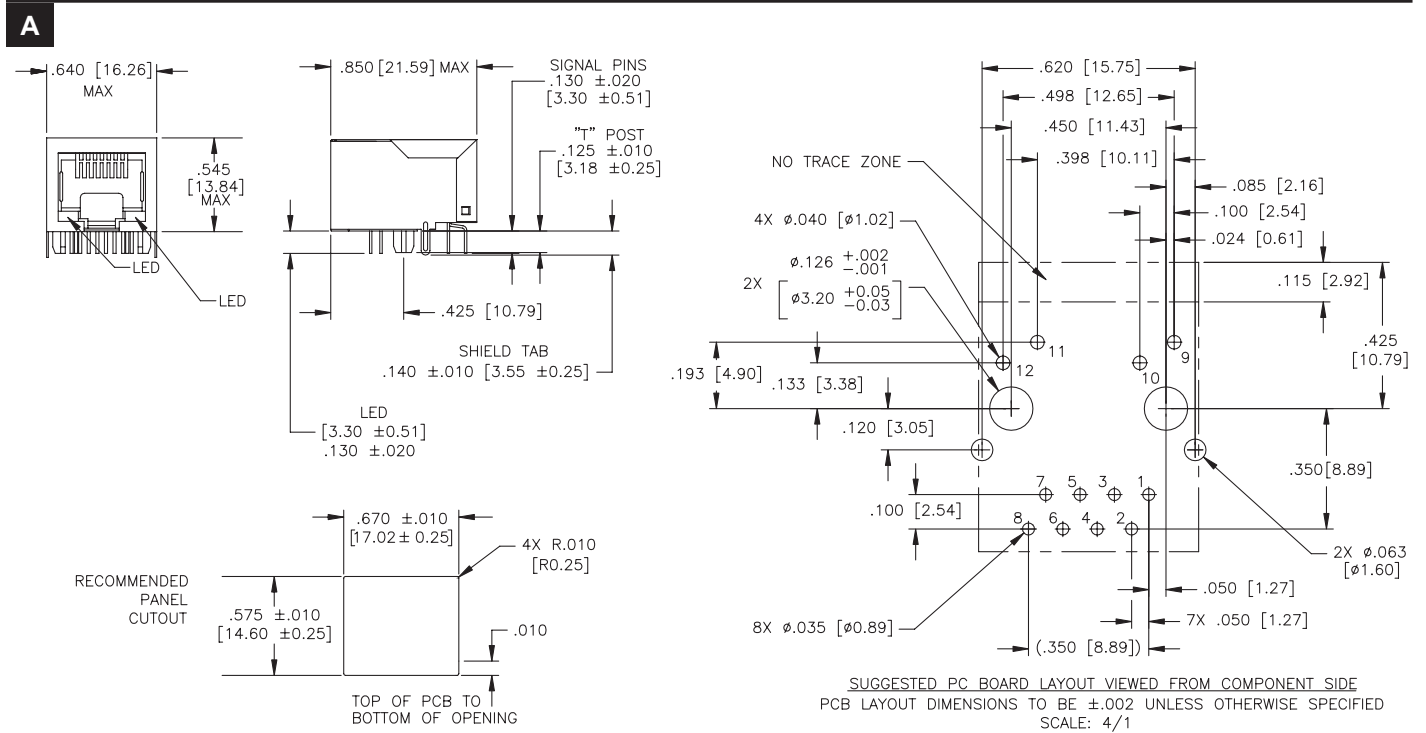
Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
J0 Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

### RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL <sup>3</sup> Rating
	Material	Finish	Material	Plating Area	Solder Area <sup>2</sup>	Material	Specification	
J0 Series	Brass	10-20m inches Nickel over 10-20m inches Brass	Phosphor Bronze	Nickel underplating and selective gold plating 15µ inches	120µ inches Sn90/Pb10 over 50µ inches nickel	Thermoplastic	UL 94 V-0	1

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

### J0 Series Mechanicals

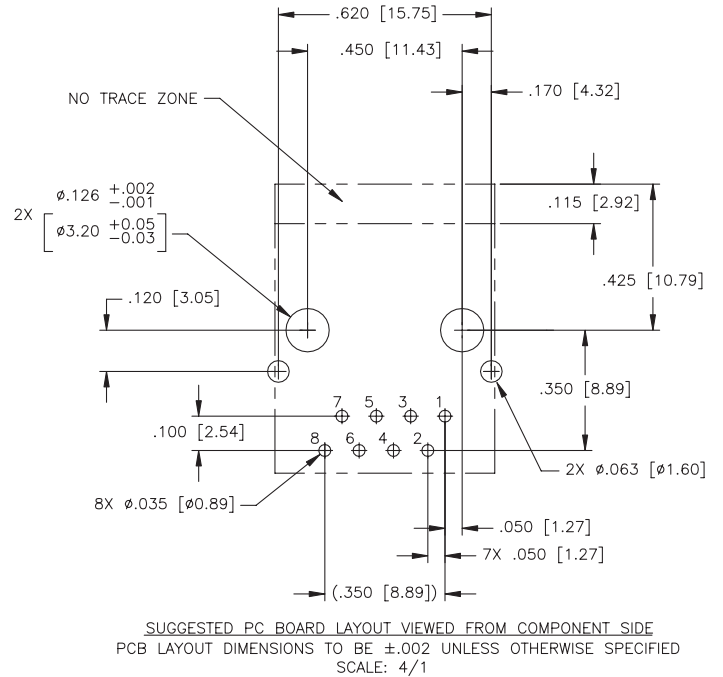
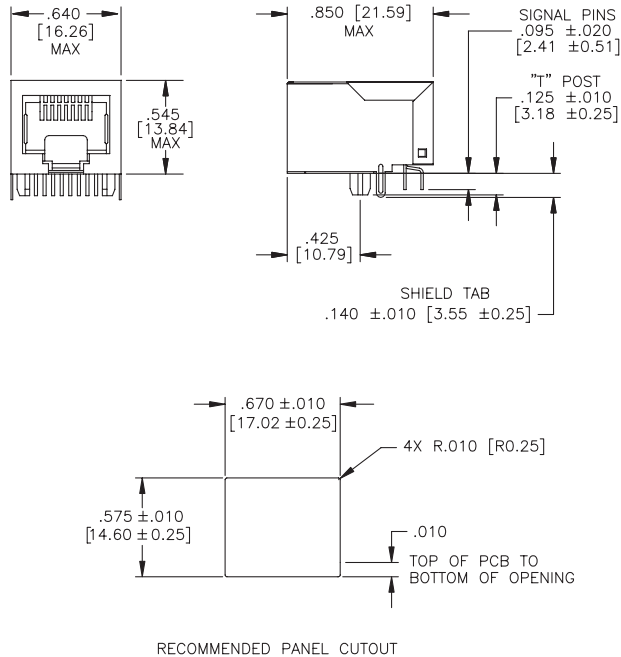


Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

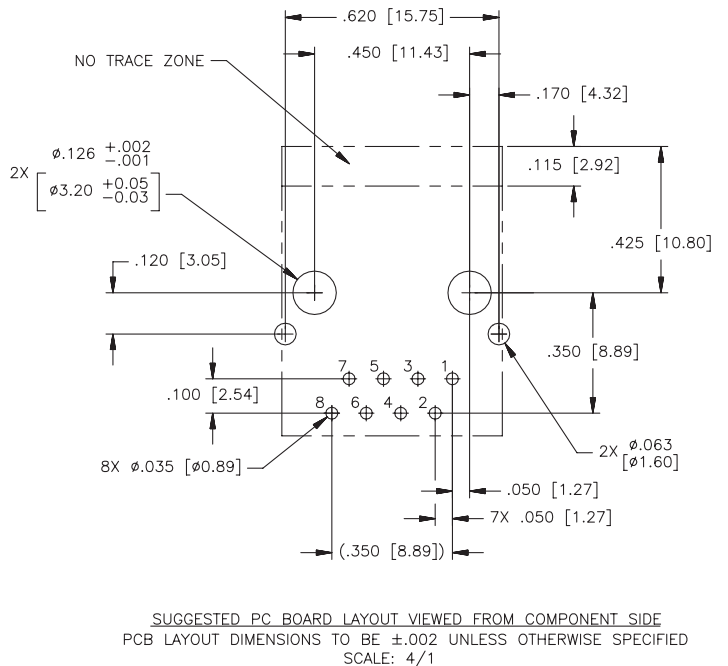
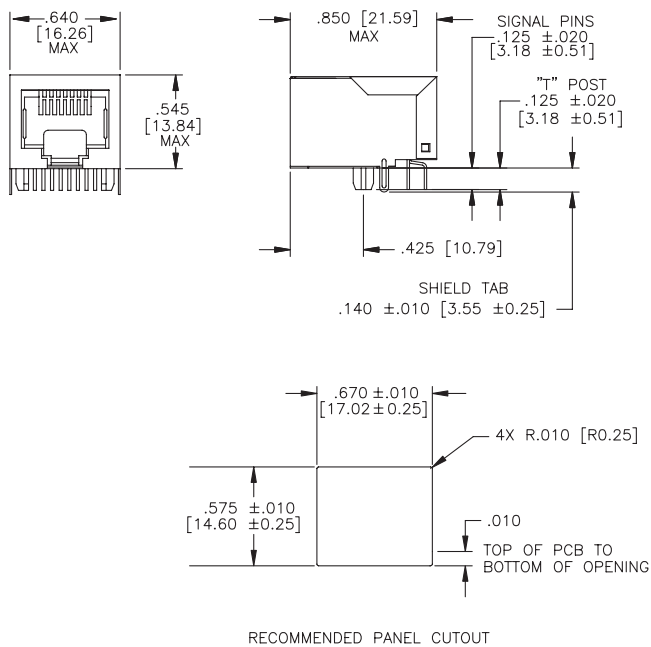
Unless otherwise specified, all tolerances are ±  $\frac{.010}{.25}$

### J0 Series Mechanicals

**C**



**D**

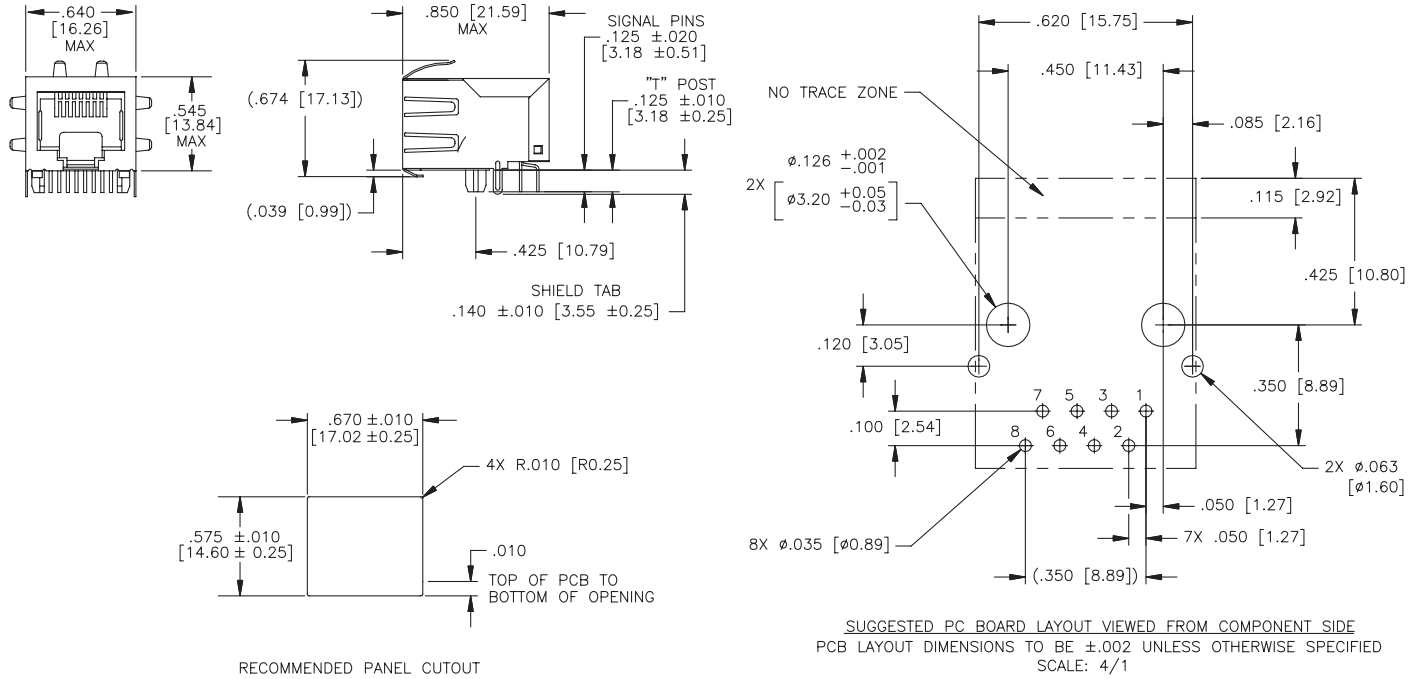


Dimensions: Inches  
mm

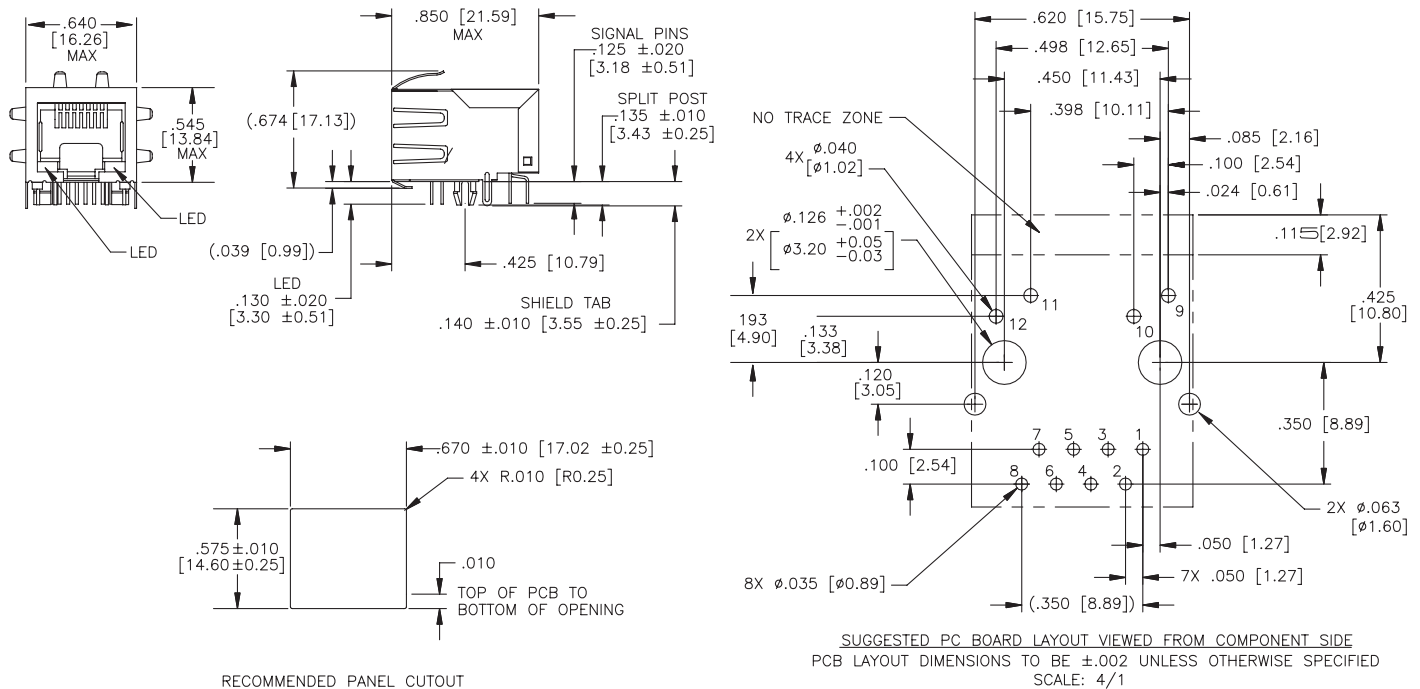
Unless otherwise specified, all tolerances are ± .010  
0,25

### J0 Series Mechanicals

**E**



**F**



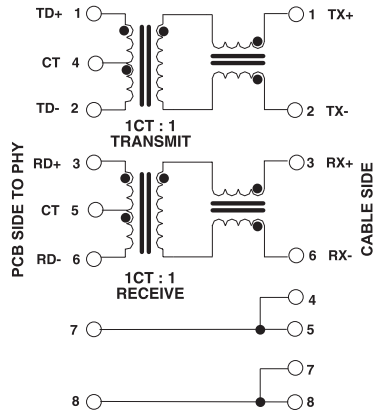
Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are ± .010 / 0.25

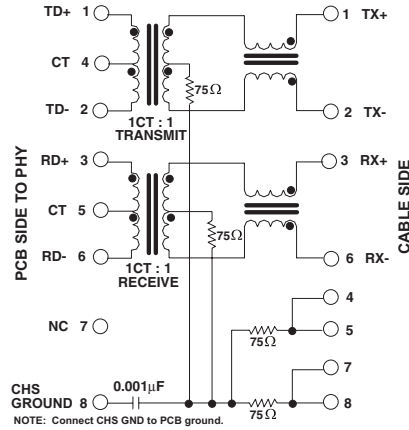


### J0 Series Electrical Schematics

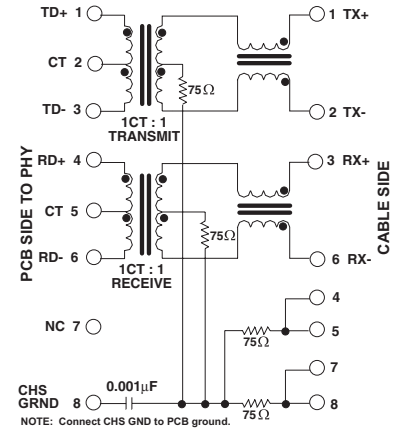
**J0006**



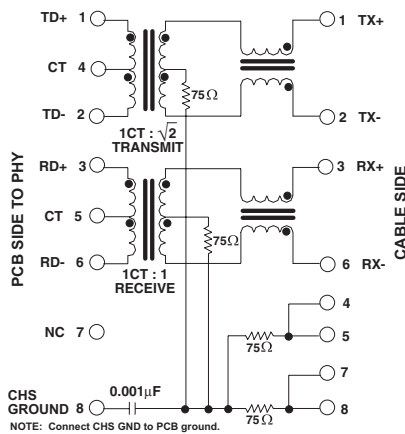
**J0011**



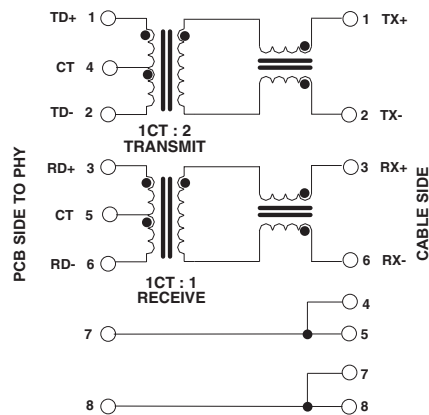
**J0012**



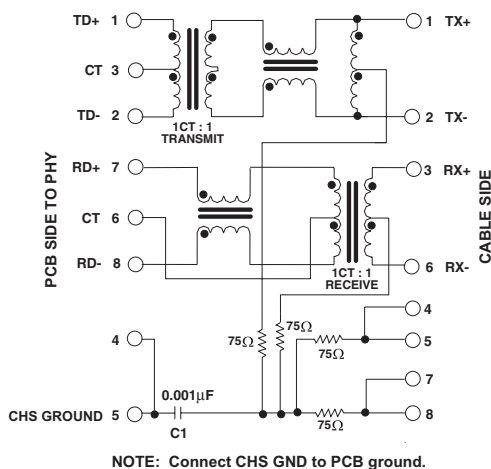
**J0018**



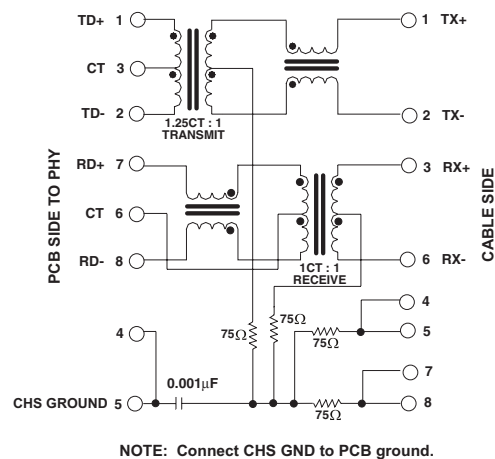
**J0024**



**J0026**

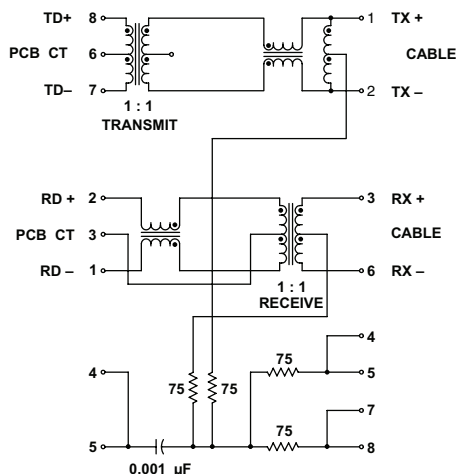


**J0033**

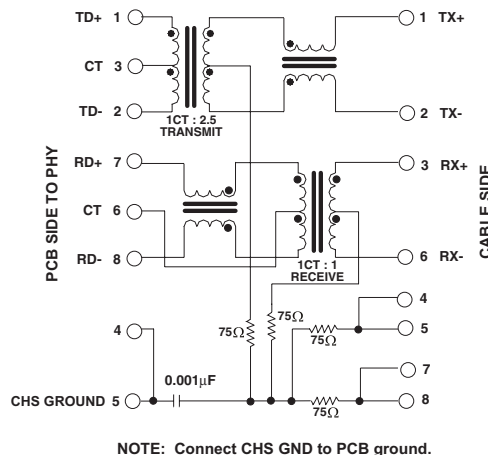


### J0 Series Electrical Schematics (continued)

**J0035**

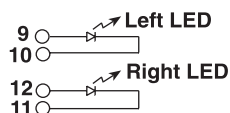


**J0073**

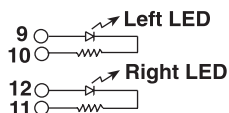


### LED Configuration

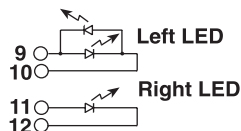
**LED = "B & E" Specification  
(LEDs without internal resistors)**



**LED = "F" Specification  
(LEDs with internal resistors)**



**LED = "G" Specification  
(Bi-color LED option with internal resistors)**



Standard LED	Wavelength	Forward* V(MAX)	(TYP)
Yellow	585 nm	2.5 V	2.1 V
Green	565 nm	2.5 V	2.2 V

\* Using an internal resistor within the LED increases the voltage rating of the diode from 2.5 V to 5.0 V (assumes bias current = 20 mA).

### For More Information:

**Pulse Worldwide Headquarters**  
12220 World Trade Dr.  
San Diego, CA 92128  
U.S.A.

**Pulse Europe**  
Einsteinstrasse 1  
D-71083 Herrenberg  
Germany

**Pulse China Headquarters**  
B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejinan Rd.  
High-Tech Zone  
Nanshan District  
Shenzhen, PR China 518057

**Pulse North China**  
Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Rd. West.  
Shanghai 200336  
China

**Pulse South Asia**  
135 Joo Seng Rd.  
#03-02  
PM Industrial Bldg.  
Singapore 368363

**Pulse North Asia**  
No. 26, Kao Ching Rd.  
Yang Mei Chen  
Taoyuan Hsien  
Taiwan  
R. O. C.

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

Tel: 858 674 8100  
Fax: 858 674 8262

Tel: 49 7032 7806 0  
Fax: 49 7032 7806 135

TEL: 86 755 33966678  
FAX: 86 755 33966700

Tel: 86 21 62787060  
Fax: 86 2162786973

Tel: 65 6287 8998  
Fax: 65 6280 0080

Tel: 886 3 4643715  
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, 2010. Pulse Engineering, Inc. All rights reserved.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Pulse:

[J0010D11](#) [J0006D21](#) [J0011D01B](#) [J0026D01E](#) [J0026D01F](#) [J0037D21](#) [J0026D01B](#) [J0018D21E](#) [J0011D21B](#)  
[J0011D21E](#) [J0011D21](#) [J0011D01](#) [J0006D21B](#) [J0026D21](#) [J0026D01](#) [J0024D21](#) [J0012D21](#) [J0011D11](#) [J0026D21F](#)  
[J0026D21B](#) [J0026D21G](#) [J0026D21E](#) [J0073D01B](#) [J0024D21B](#) [J0026D11](#) [J0073D21B](#) [J0035D21B](#) [J0033D21](#)  
[J0018D21](#) [J0048D21M](#) [J0073D01BNL](#) [J0006D11](#) [J0033D21NL](#) [J0037D21NL](#) [J0011D11JNL](#) [J0026D11NL](#)  
[J0011D11NL](#) [J0048D21MNL](#) [J0026D01FNL](#) [J0026D01HNL](#) [J0024D21NL](#) [J0010D11NL](#) [J0024D21BNL](#)  
[J0035D21BNL](#) [J0076D21BNL](#) [J0073D21BNL](#)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Pulse:

[J0006D21](#) [J0011D01B](#) [J0026D01E](#) [J0026D01F](#) [J0026D01B](#) [J0018D21E](#) [J8064D649P](#) [J8064D648A](#) [J0011D21B](#)  
[J0011D21E](#) [J0011D21](#) [J0011D01](#) [J0006D21B](#) [J0026D21](#) [J0026D01](#) [J0024D21](#) [J0012D21](#) [J0026D21F](#)  
[J0026D21B](#) [J0026D21G](#) [J0026D21E](#) [J0024D21B](#) [J0073D21B](#) [J8064E62](#) [J8064E68](#) [J8064E64](#) [J8064E66](#)  
[J0035D21B](#) [J0033D21](#) [J0018D21](#) [J8064D668A](#) [J0033D21NL](#) [J0026D01FNL](#) [J0026D01HNL](#) [J0024D21NL](#)  
[J0024D21BNL](#) [J0035D21BNL](#) [J8064D628ANL](#)