

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.



Features and Benefits:

- RoHS-5 peak wave solder temperature rating 235°C
- RoHS-6 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
- 350μH 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-5 Part No.	RoHS-6 Part No.	Turns Ratios		Mech. Drawing	EMI Fingers	LEDs ¹ (L/R)	Insertion Loss (dB TYP)	Return Loss (dB TYP) 100W ±15W					Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vrms)
		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	
J0006D01B	J0006D01BNL	1CT:1	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0006D21	J0006D21NL	1CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0006D21B	J0006D21BNL	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0011D01	J0011D01NL	1CT:1	1CT:1	C	No	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0011D01B	J0011D01BNL	1CT:1	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0011D21	J0011D21NL	1CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0011D21B	J0011D21BNL	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0011D21E	J0011D21ENL	1CT:1	1CT:1	B	YES	G/G	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0012D21	J0012D21NL	1CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0018D21	J0018D21NL	1CT:1.414	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0018D21E	J0018D21ENL	1CT:1.414	1CT:1	B	YES	G/G	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0024D21	J0024D21NL	1CT:2	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0024D21B	J0024D21BNL	1CT:2	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D01	J0026D01NL	1CT:1	1CT:1	D	No	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D01B	J0026D01BNL	1CT:1	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D01E	J0026D01ENL	1CT:1	1CT:1	A	No	G/G	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D01F ²	J0026D01FNL ²	1CT:1	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D21	J0026D21NL	1CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D21B	J0026D21BNL	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D21E	J0026D21ENL	1CT:1	1CT:1	B	YES	G/G	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D21F ²	J0026D21FNL ²	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0026D21G ³	J0026D21GNL ³	1CT:1	1CT:1	B	YES	YG/G	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0033D21	J0033D21NL	1.25CT:1	1CT:1	E	YES	N/A	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0035D21B	J0035D21BNL	1CT:1	1CT:1	F	YES	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500
J0073D01B	J0073D01BNL	1CT:2.5	1CT:1	A	No	G/Y	-1	-20	-16	-12	-10	-10	-40	-35	-30	-30	-20	1500

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. 4. 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. 5. 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)
J0 Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

RJ45 Material Specification

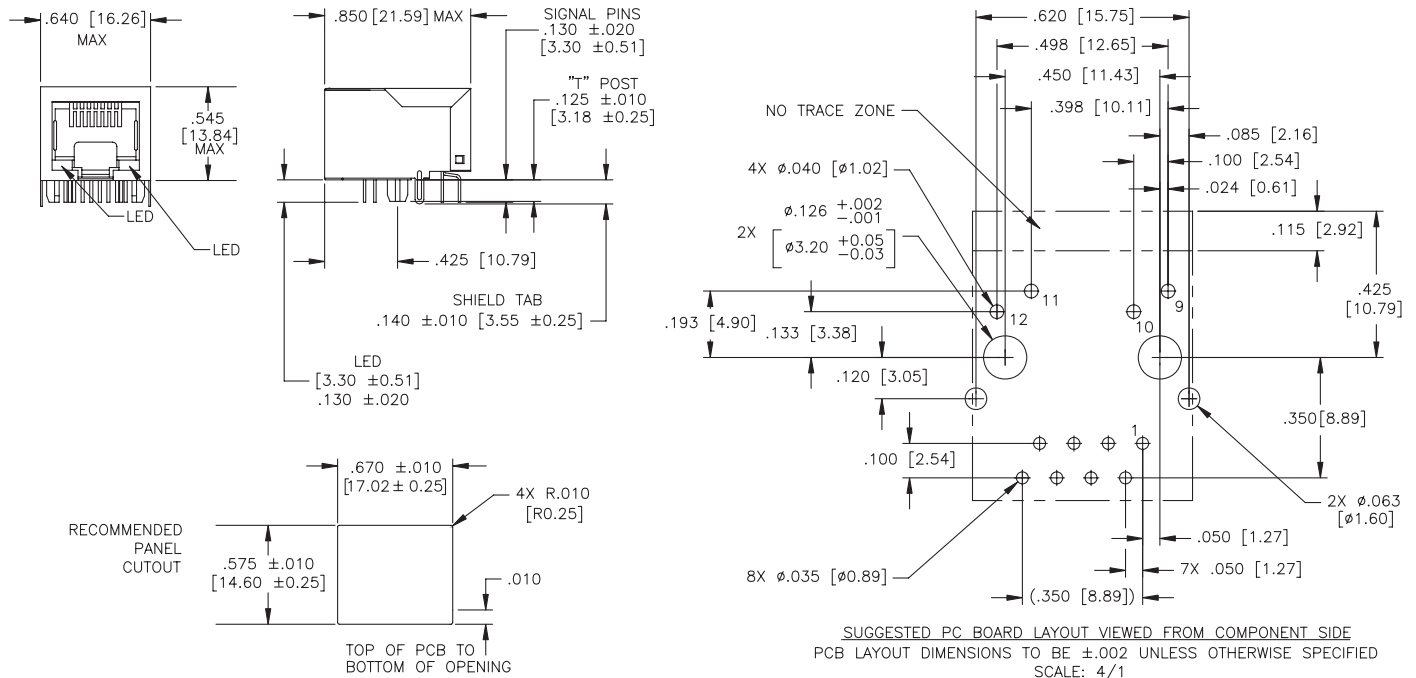
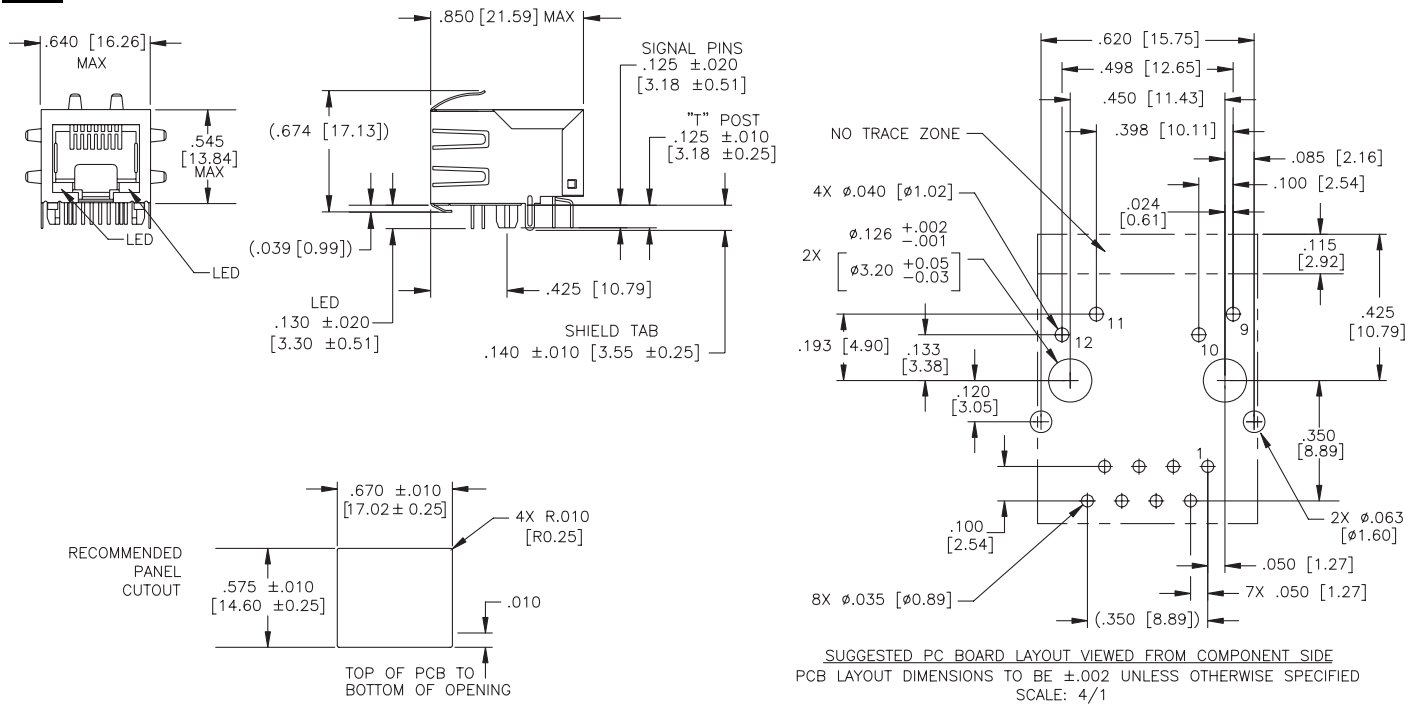
Part Number	Shield		Contact		Solder Area ²	Housing		MSL ³ Rating
	Material	Finish	Material	Plating Area		Material	Specification	
J0 Series	Brass	10-20m inches Nickel over 10-20m inches Brass	Phosphor Bronze	Nickel underplating and selective gold plating 15μ inches	120μ inches Sn90/Pb10 over 50μ inches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

Notes: 1. Connector dimensions comply with FCC dimension requirements. 2. RoHS-6 parts are tin matte finish over nickel. 3. MSL = Moisture Sensitivity Level rating from 1 to 5 (highest rating = 1, lowest rating = 5)

USA 858 674 8100 • UK 44 1483 401 700 • France 33 3 84 35 04 04 • Singapore 65 6287 8998 • Shanghai 86 21 54643211 / 2 • China 86 769 85538070 • Taiwan 886 3 4641811

J0 Series Mechanicals

A

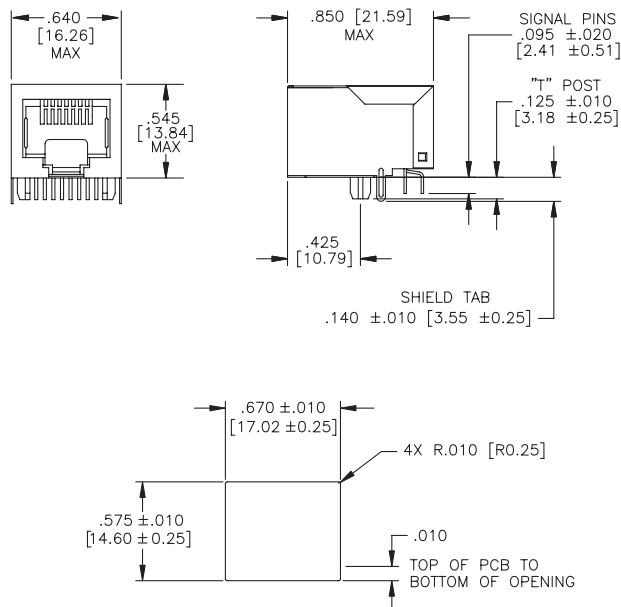
**B**

Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified,
all tolerances are $\pm \frac{.010}{0.25}$

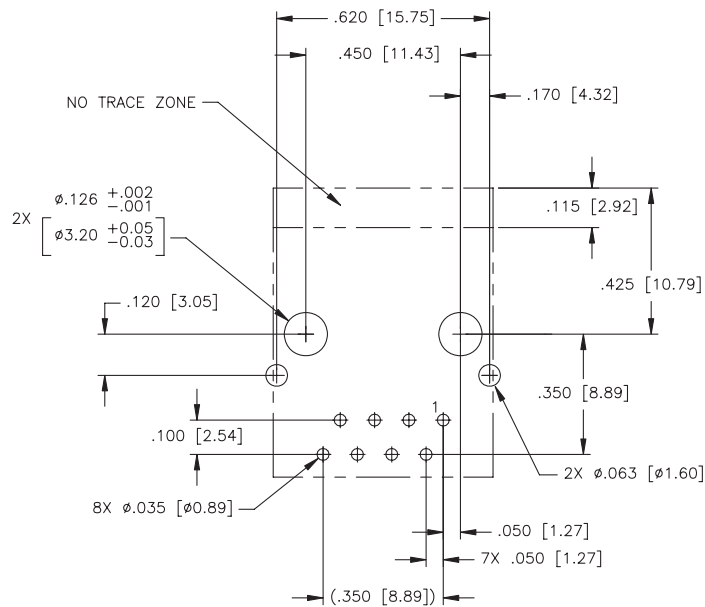


J0 Series Mechanicals

C

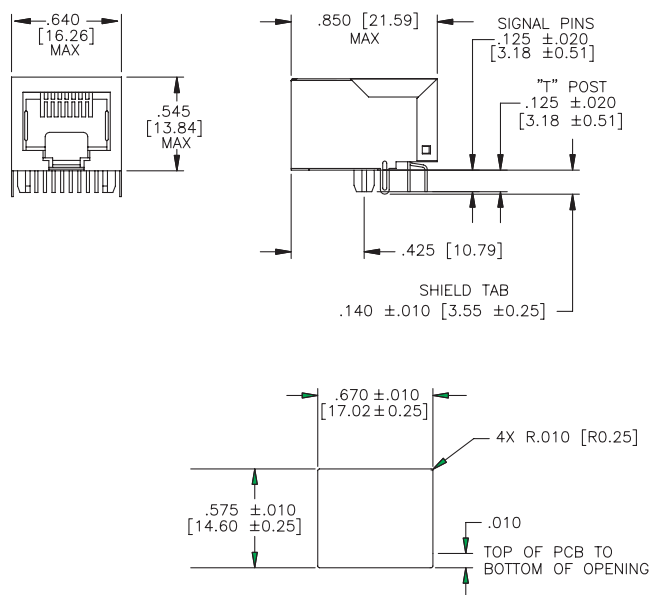


RECOMMENDED PANEL CUTOUT

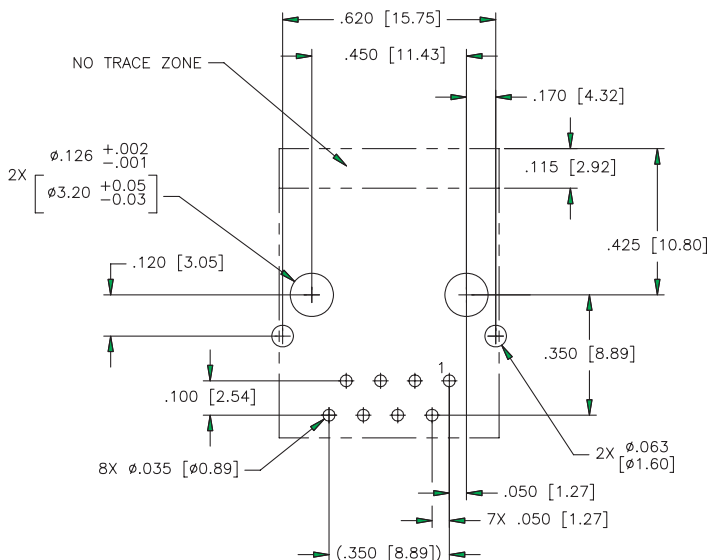


SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
 PCB LAYOUT DIMENSIONS TO BE ±.002 UNLESS OTHERWISE SPECIFIED
 SCALE: 4/1

D



RECOMMENDED PANEL CUTOUT

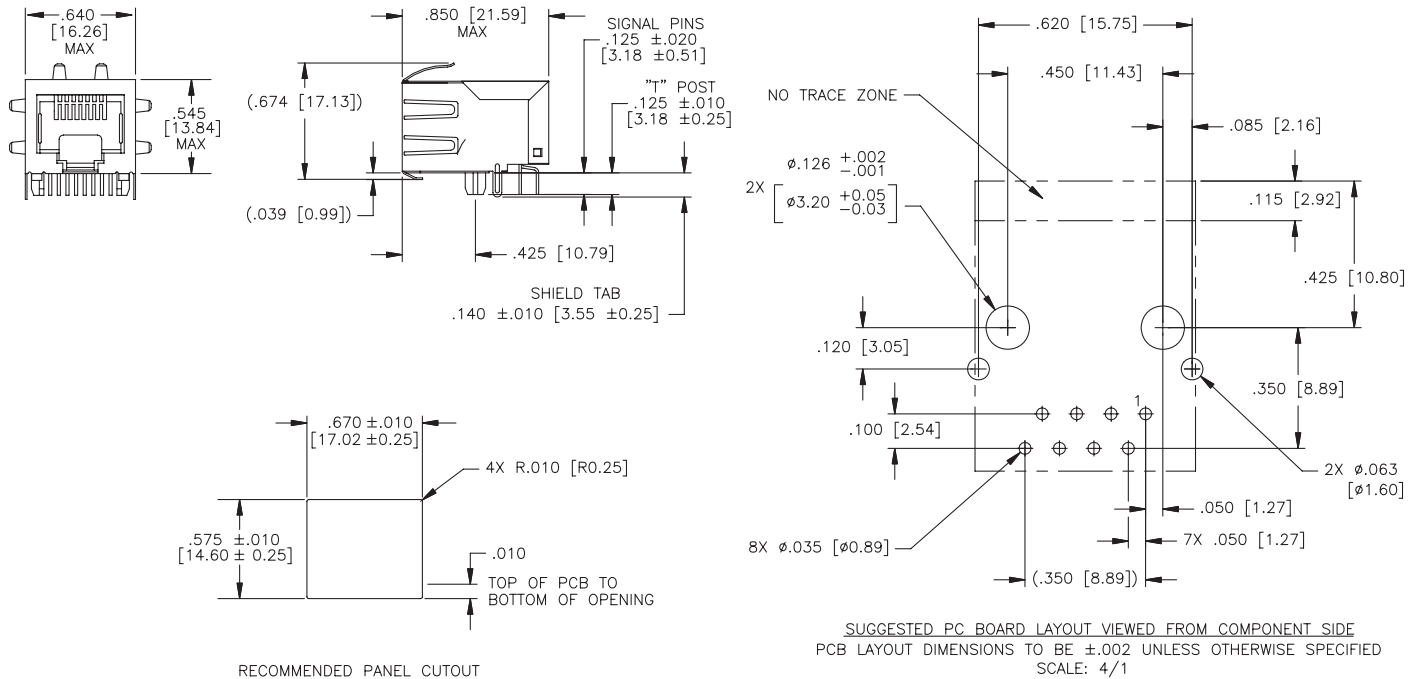


SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
 PCB LAYOUT DIMENSIONS TO BE ±.002 UNLESS OTHERWISE SPECIFIED
 SCALE: 4/1

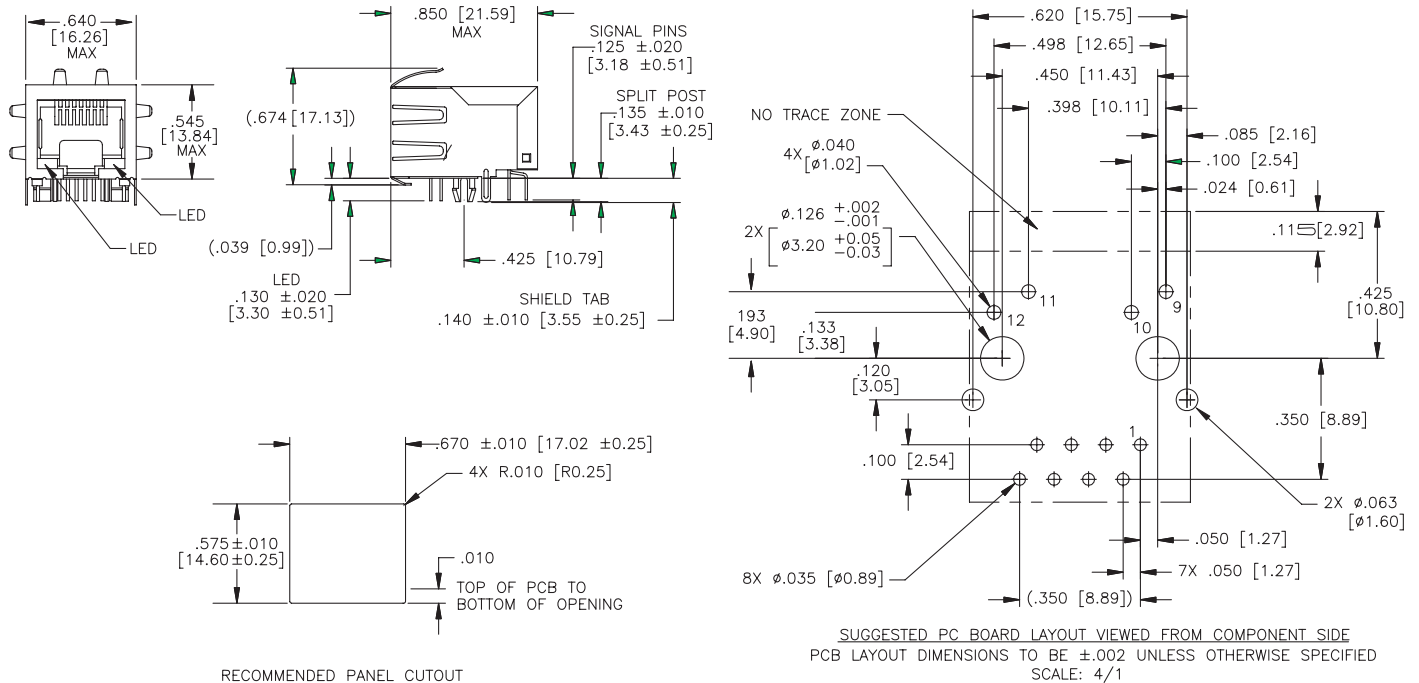
Dimensions: Inches
 mm
 Unless otherwise specified,
 all tolerances are ± .010
 .025

J0 Series Mechanicals

E



F

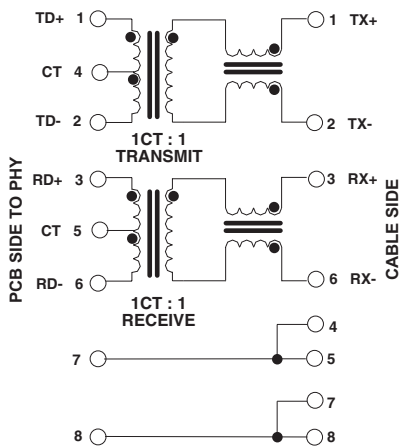


Dimensions: Inches
mm
Unless otherwise specified,
all tolerances are ± .010
0.25

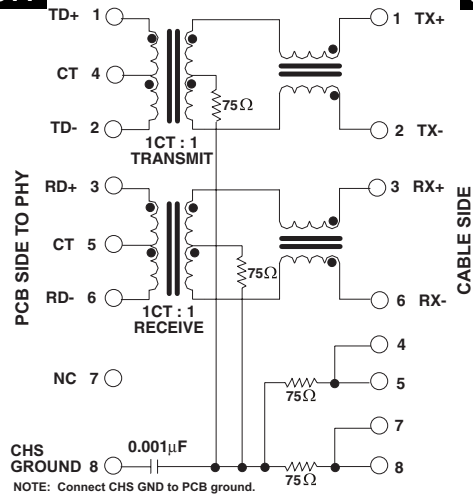


J0 Series Electrical Schematics

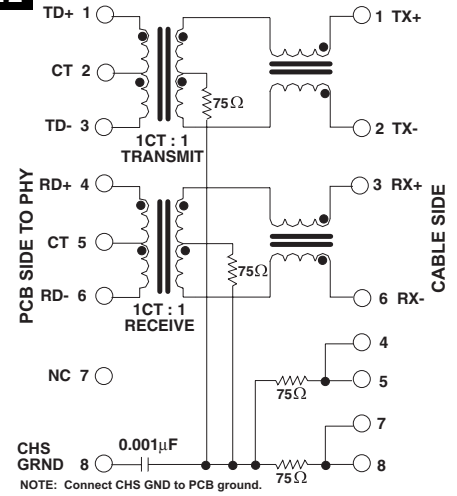
J0006



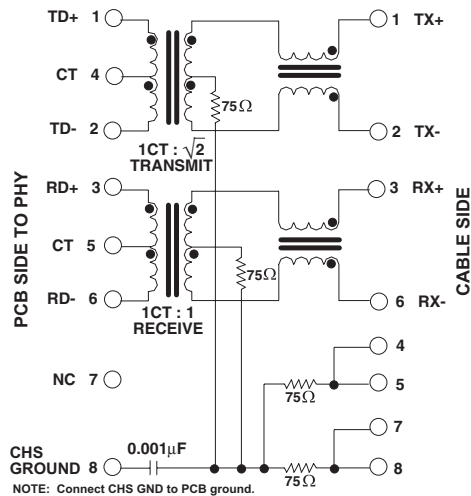
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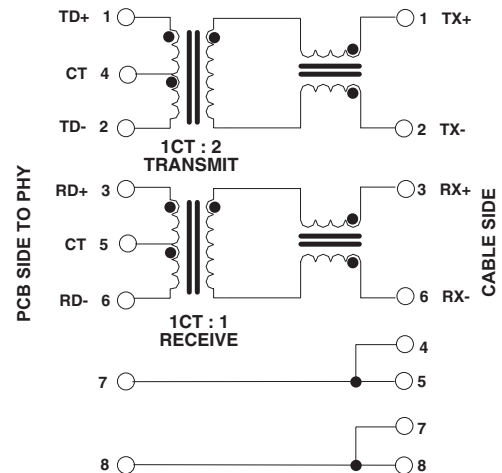
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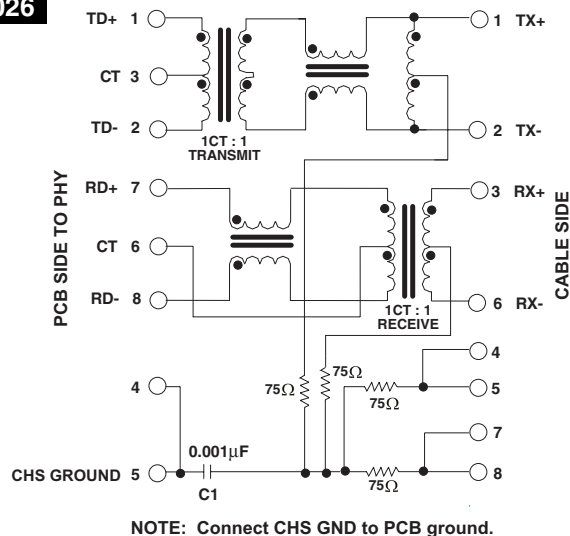
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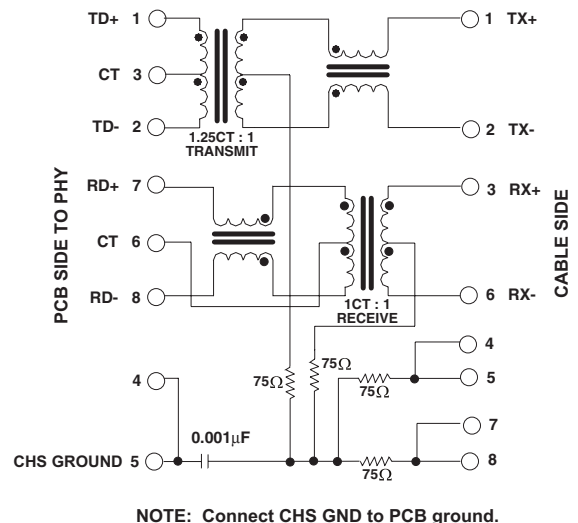
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J0026

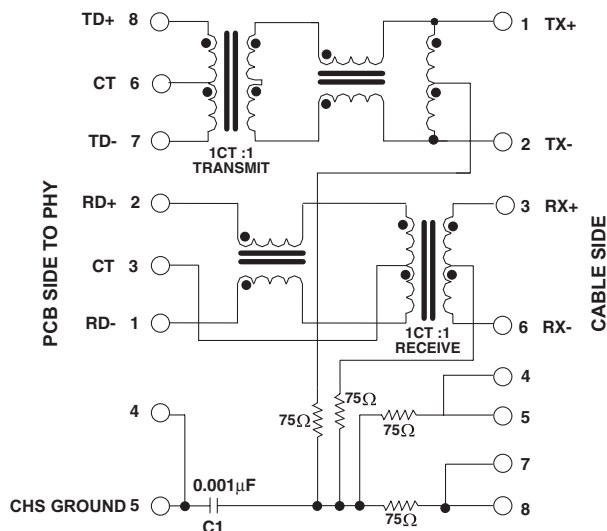


J0033



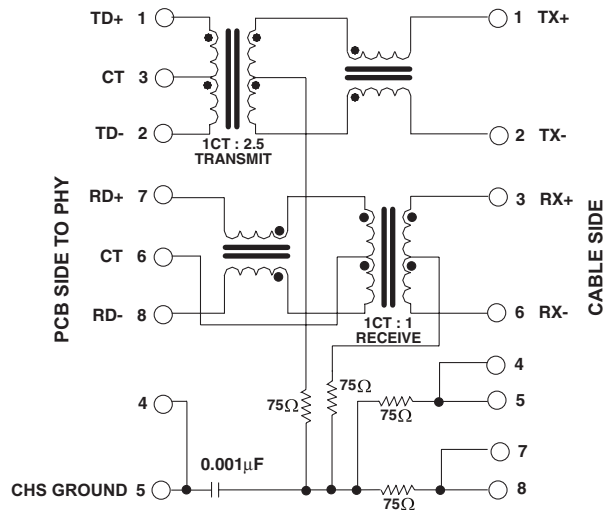
J0 Series Electrical Schematics (*continued*)

J0035



NOTE: Connect CHS GND to PCB ground.

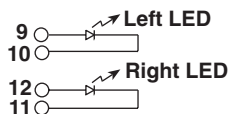
J0073



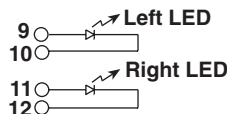
NOTE: Connect CHS GND to PCB ground.

LED Configuration

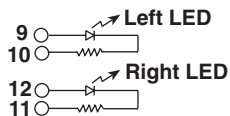
LED = "B & E" Specification (LEDs without internal resistors)



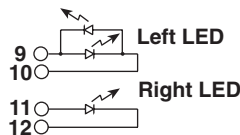
LED = "M" Specification (LEDs without internal resistors)



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).

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