

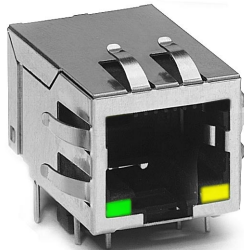
PULSEJACK™

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 μ H 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 ¹ (L/R)	Insertion Loss (dB TYP)	Return Loss (dB TYP) 100W $\pm$ 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	1 MIN	
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 ²	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 ²	1CT:1	1CT:1	B	YES	G/Y	-1	-20	-16	-12	-10	-40	-35	-30	-30	-20	2250	
J0026D21GNL ³	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 ³ Rating
	Material	Finish	Material	Plating Area	Solder Area ²	Material	Specification	
J0 Series	Brass	10-20m inches Nickel over 10-20m inches Brass	Phosphor Bronze	Nickel underplating and selective gold plating 15 μ inches	120 μ inches Sn90/Pb10 over 50 μ inches nickel	Thermoplastic	UL 94 V-0	1

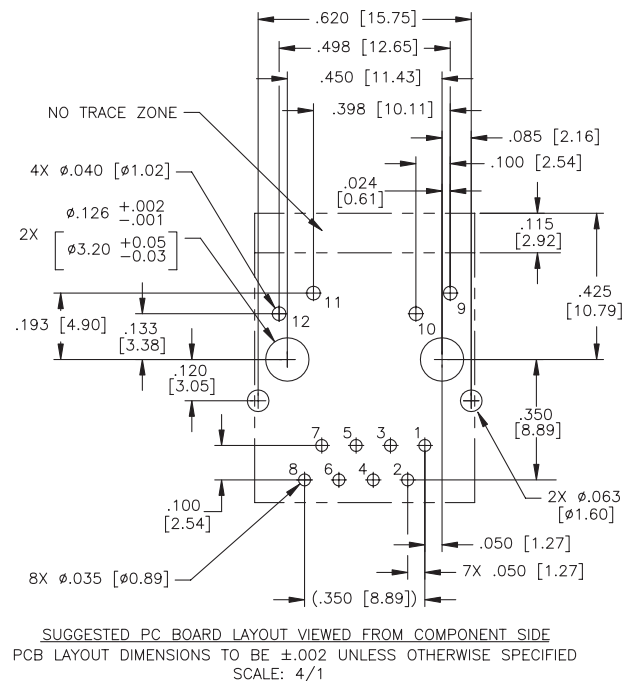
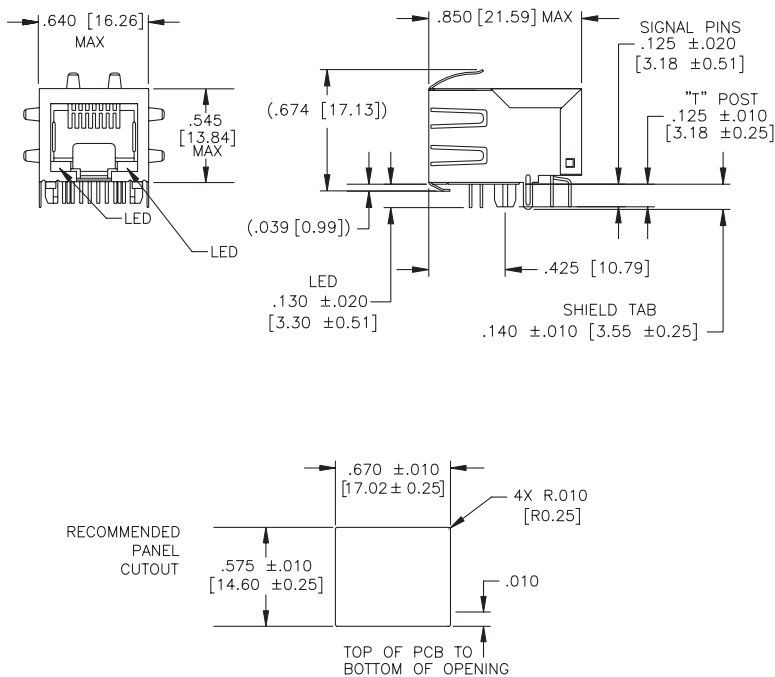
Notes: 1. Connector dimensions comply with FCC dimension requirements. 3. MSL = Moisture Sensitivity Level rating from 1 to 5 (highest = 1, lowest = 5)
2. RoHS parts are tin matte finish over nickel.

USA 858 674 8100 • Germany 49 7032 7806 0 • Singapore 65 6287 8998 • Shanghai 86 21 62787060 • China 86 755 33966678 • Taiwan 886 3 4643715

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The drawing consists of three views of the LED assembly:

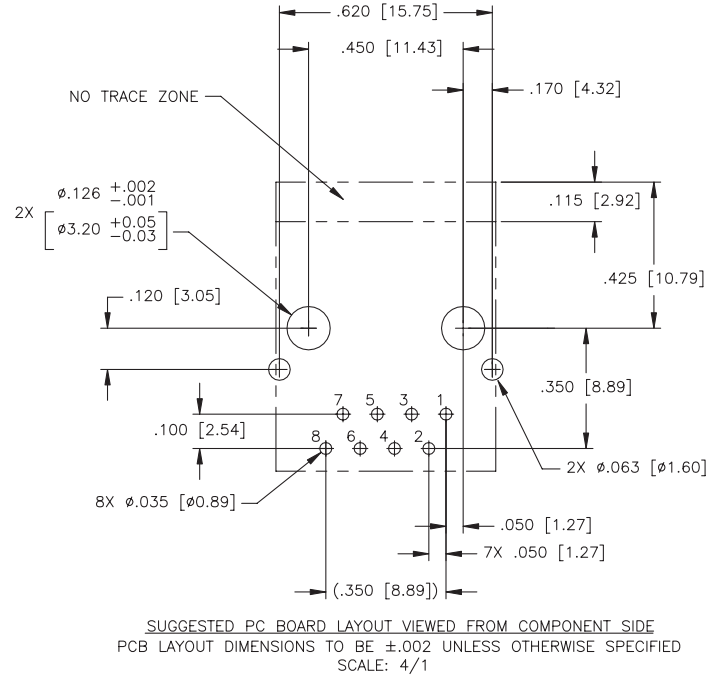
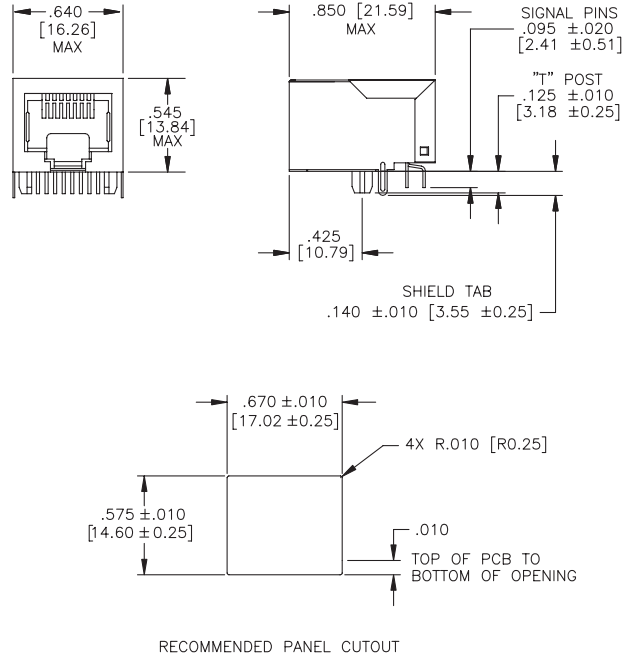
- Top View (Left):** Shows the footprint of the assembly. The total width is $.640$ [16.26] MAX. The distance from the centerline to the edge of the LED is $.545$ [13.84] MAX. Two LEDs are indicated by arrows.
- Side View (Top Right):** Shows the profile of the assembly. The total height is $.850$ [21.59] MAX. The height of the signal pins is $.130 \pm .020$ [3.30 $\pm$ 0.51]. The height of the "T" POST is $.125 \pm .010$ [3.18 $\pm$ 0.25]. The height of the LED is $.130 \pm .020$. The height of the shield tab is $.140 \pm .010$ [3.55 $\pm$ 0.25]. The distance from the centerline to the edge of the LED is $.425$ [10.79].
- Front View (Bottom):** Shows the front of the assembly. The total width is $.670 \pm .010$ [17.02 $\pm$ 0.25]. The distance from the centerline to the edge of the LED is $.575 \pm .010$ [14.60 $\pm$ 0.25]. The radius of the top corners is $4 \times R.010$ [R0.25]. The thickness of the assembly is $.010$. The text "RECOMMENDED PANEL CUTOUT" is shown. The text "TOP OF PCB TO BOTTOM OF OPENING" is shown.



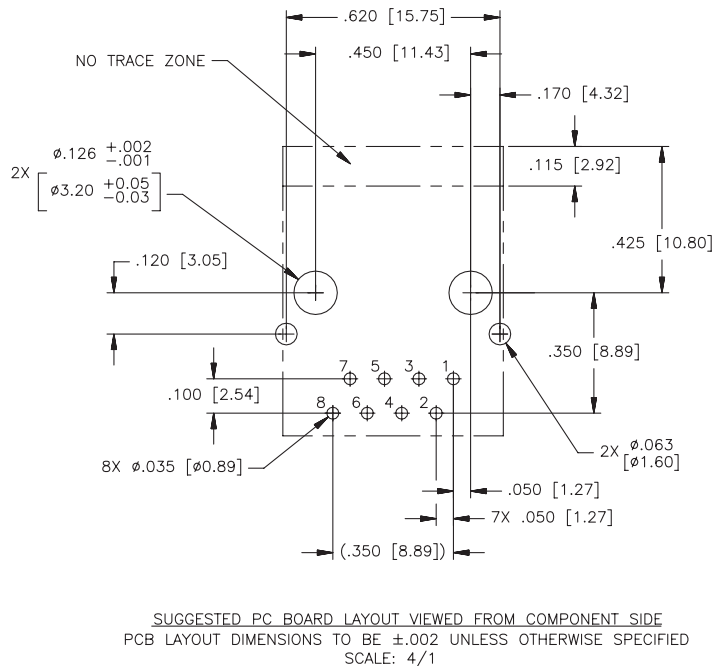
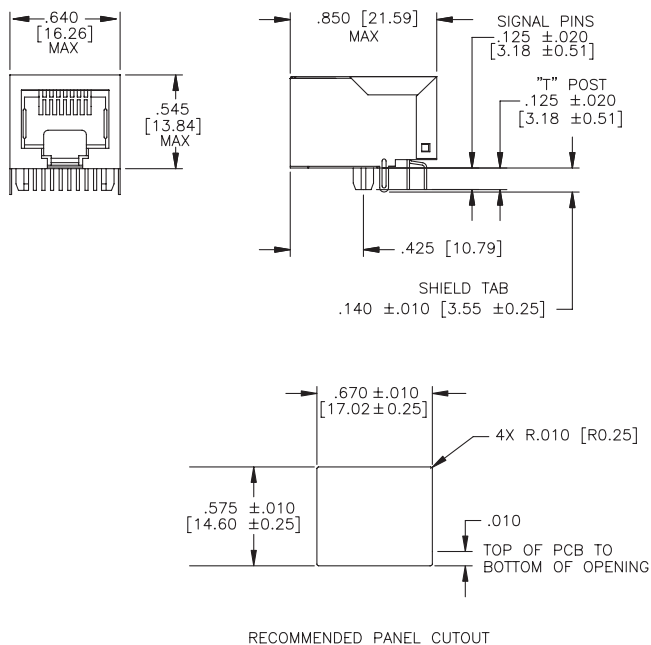
Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

J0 Series Mechanicals

C



D

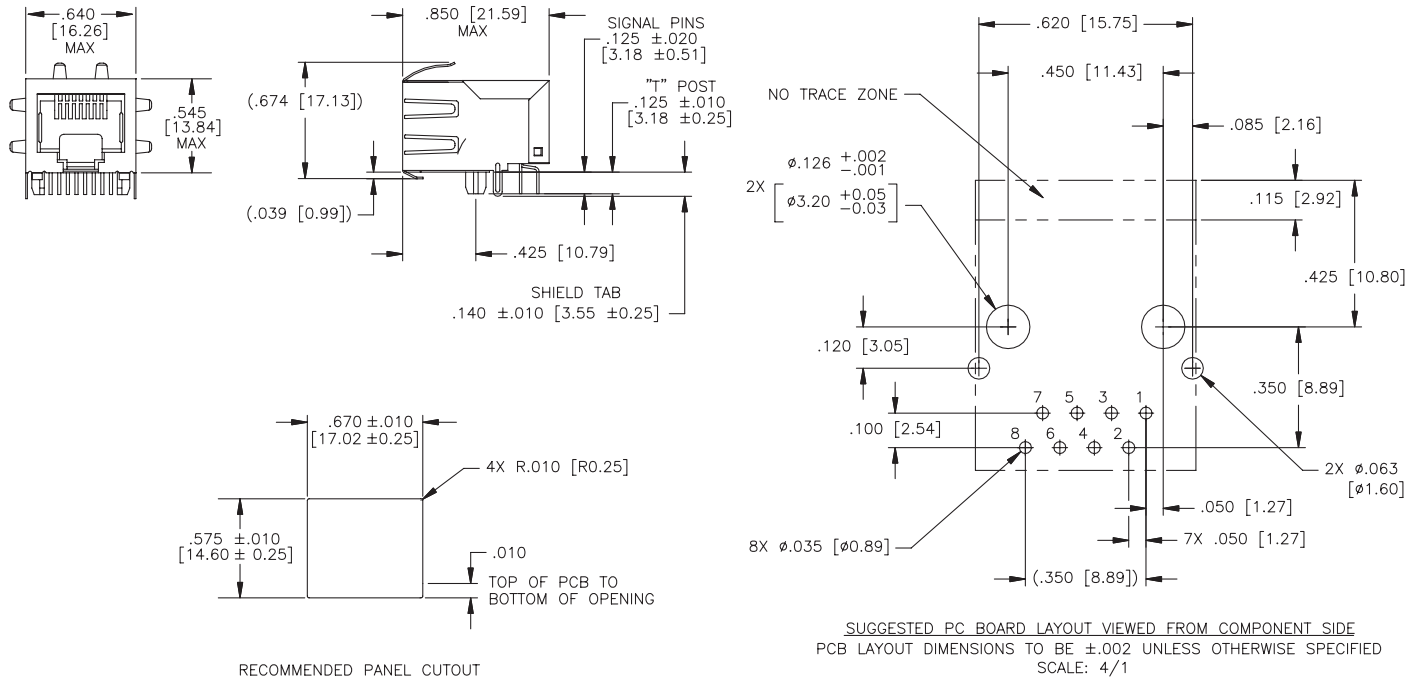


Dimensions: Inches
mm

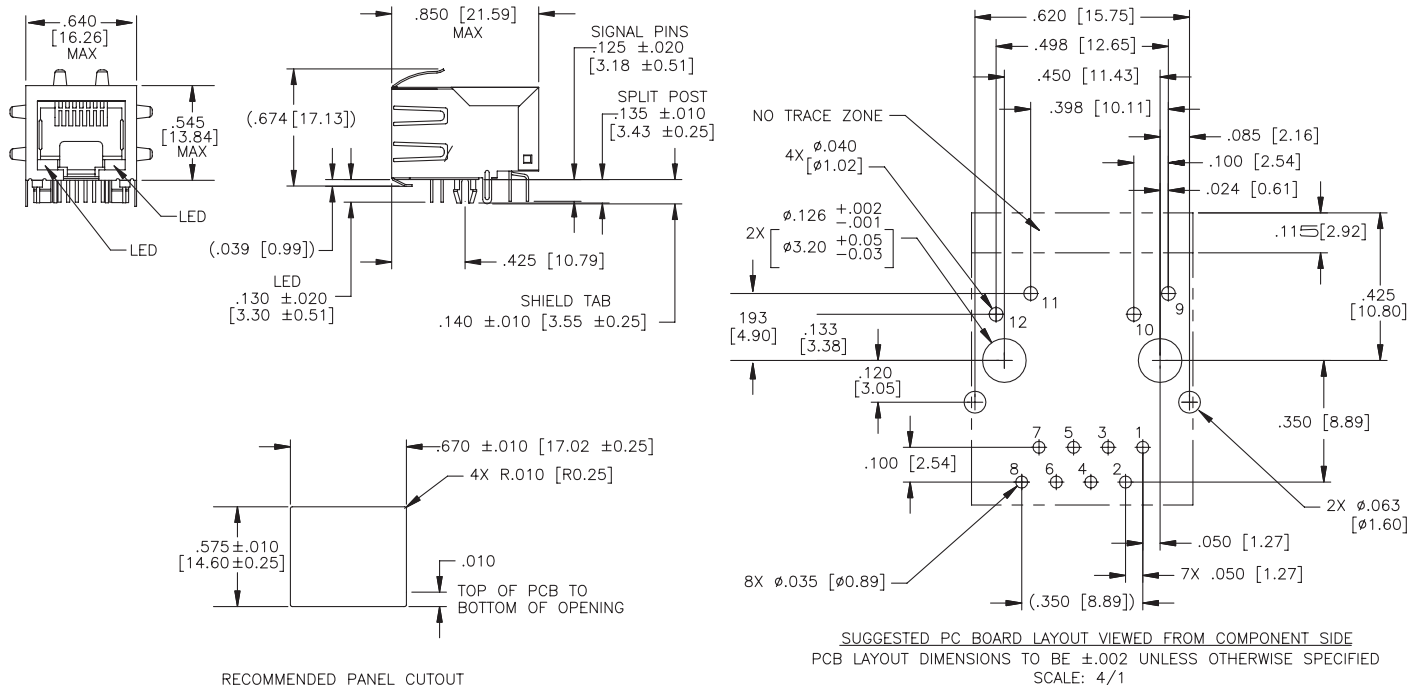
Unless otherwise specified, all tolerances are ± .010
0.25

J0 Series Mechanicals

E



F



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

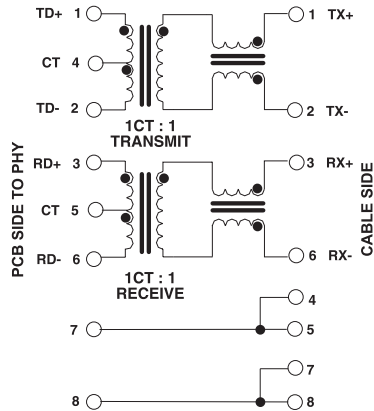
Unless otherwise specified, all tolerances are $\pm \frac{.010}{.25}$



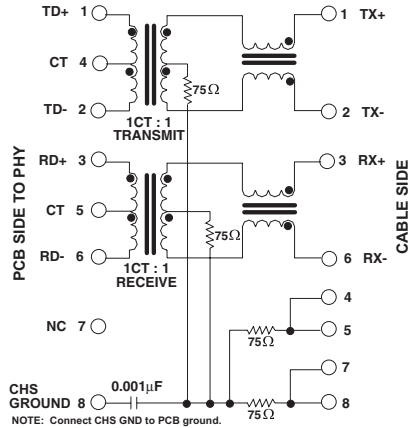
J0 Series Electrical Schematics

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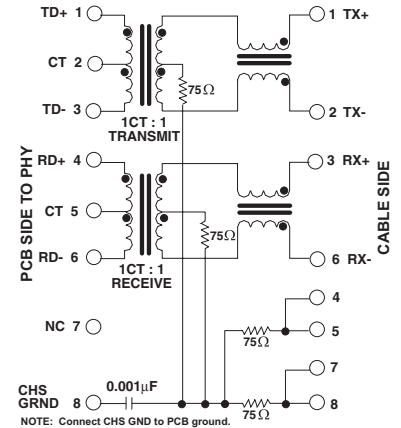
J0006



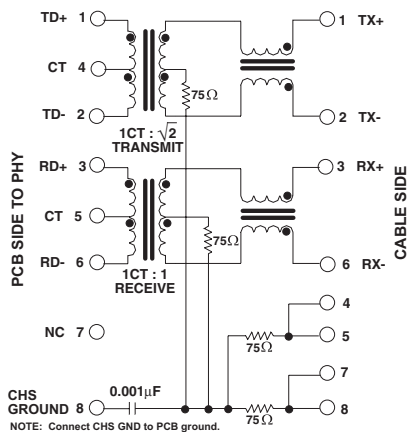
J0011



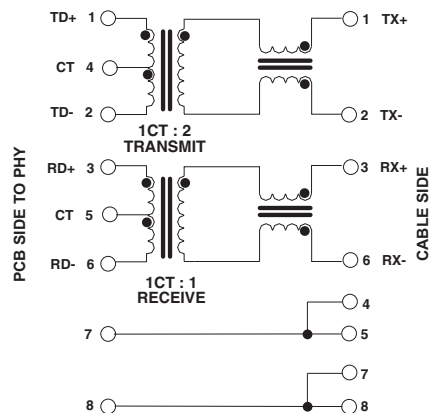
J0012



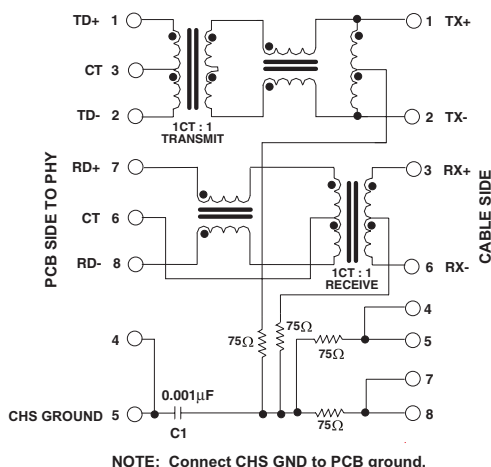
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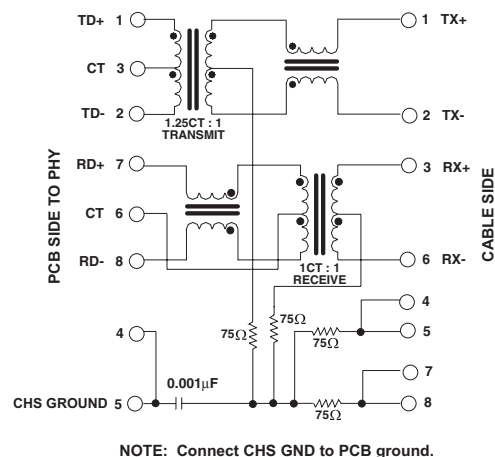
J0024



J0026

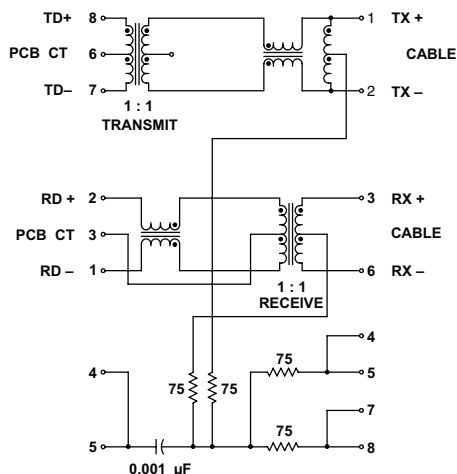


J0033

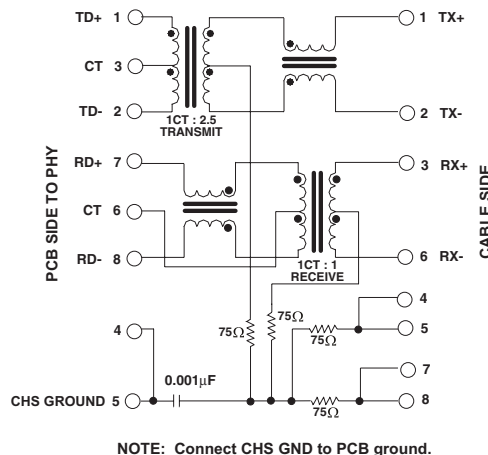


J0 Series Electrical Schematics (continued)

J0035

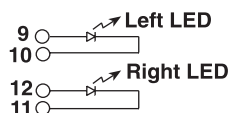


J0073

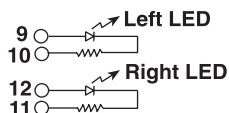


LED Configuration

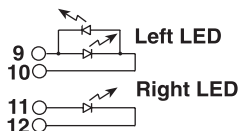
LED = "B & E" Specification (LEDs without internal resistors)



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).

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