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Industrial 2.5GBase-T PulseJack™ Integrated RJ45 Connector

Rugged latch-up/Down design for industrial and outdoor use



Features and Benefits:

- *Latch-Up, Latch-Down plug orientation options*
- *Side entry,small footprint to minimize board space*
- *Meets IEEE 802.3 specification for 2.5Gigabit*
- *Industrial operating temperature -40 to +85oC*
- *High performance for EMI suppression*

Electrical Specifications @ 25°C - Operating Temperature -40°C to 85°C					
Part Number	**Connector Orientation**	**LED Configuration** (L/R)	**EMI Fingers**	**Inductance (min)** 100kHz, 0.1mA - Media Side	**Isolation** (Pri:Sec)
JXD0-0101NL	Latch-Down	Green / Green-Orange	Top Only	180uH	2250VDC / 60sec
JXD0-0104NL	Latch-Down	Green-Yellow / Green-Yellow	None	180uH	2250VDC / 60sec
JXD0-0105NL	Latch-Down	Green-Yellow / Green-Yellow	Top Only	180uH	2250VDC / 60sec
JXD1-0101NL	Latch-Up	Green / Green-Orange	Top Only	180uH	2250VDC / 60sec
JXD1-0104NL	Latch-Up	Green-Yellow / Green-Yellow	None	180uH	2250VDC / 60sec
JXD1-0105NL	Latch-Up	Green-Yellow / Green-Yellow	Top Only	180uH	2250VDC / 60sec

Electrical Specifications @ 25°C - Operating Temperature -40°C to 85°C									
Part Number	**Insertion Loss** (Max)	**Return Loss*** (dB MIN) 100Ω (±15Ω)			**Cross Talk** (dB TYP)			**Common Mode Rejection** (dB TYP)	
	1-125 MHz	**1-40 MHz**	**60-120 MHz***	**120-250 MHz***	**1 MHz**	**30-60 MHz**	**125 MHz**	**1-30 MHz**	**30-200 MHz**
JXD0-0101NL	-1.0dB	-20dB	-12dB	-8dB	-40dB	-35dB	-30dB	-35dB	-30dB
JXD0-0104NL	-1.0dB	-20dB	-12dB	-8dB	-40dB	-35dB	-30dB	-35dB	-30dB
JXD0-0105NL	-1.0dB	-20dB	-12dB	-8dB	-40dB	-35dB	-30dB	-35dB	-30dB
JXD1-0101NL	-1.0dB	-20dB	-12dB	-8dB	-40dB	-35dB	-30dB	-35dB	-30dB
JXD1-0104NL	-1.0dB	-20dB	-12dB	-8dB	-40dB	-35dB	-30dB	-35dB	-30dB
JXD1-0105NL	-1.0dB	-20dB	-12dB	-8dB	-40dB	-35dB	-30dB	-35dB	-30dB

* Return Loss is calculated using -20 + [15 x LOG10 (f/40MHz)]

Notes:

1. ROHS Compliant:
2. Plastic housing: thermoplastic material with flammability rating UL 94V-0 or better
3. Contacts plating: 30 micro-inch gold plating
4. Contacts base material: Phosphor bronze
5. Under plating: 30 micro-inch min nickel
6. Solder Tail Plating: 100 micro-inch (min), inches 100% tin, matte finish
7. Metal shield nickel plating on Copper Alloy
8. Jack cavity conforms to FCC part 68 subpart
9. PCB plating: HASL
10. Storage temperature: -40°C to +85°C
11. Compliance to J-STD:
    A. J-STD-002: solderabilitiy at 245°C DIP and LOOK test
    B. J-STD-020: level 1, no moisture sensitive
    C. J-STD-075: R7, 260°C maximum through Wave Solder
12. Parts come in full Trays of 50pcs

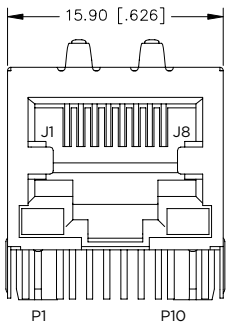
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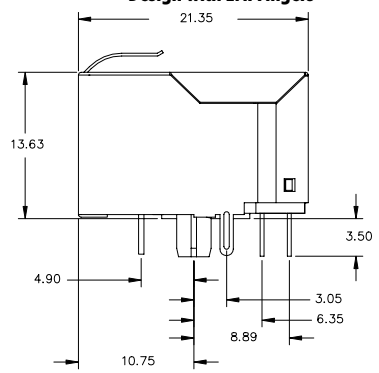
Mechanicals

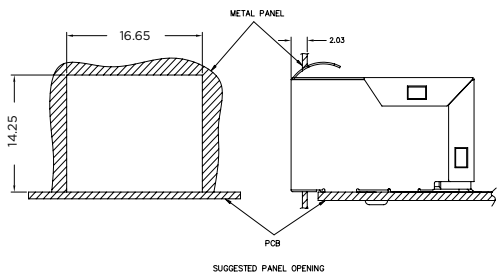
JXD0-010xNL



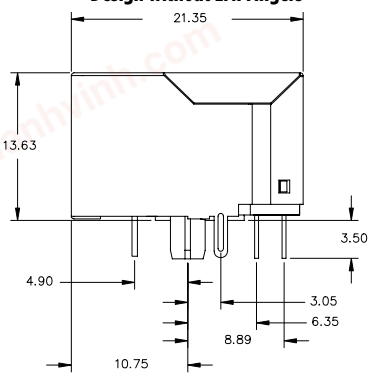
Dimensions:
Unless otherwise specified,
all tolerances are ±0,25

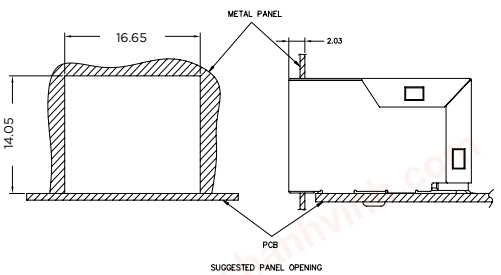
Design with EMI Fingers



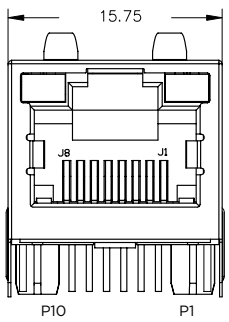


Design without EMI Fingers

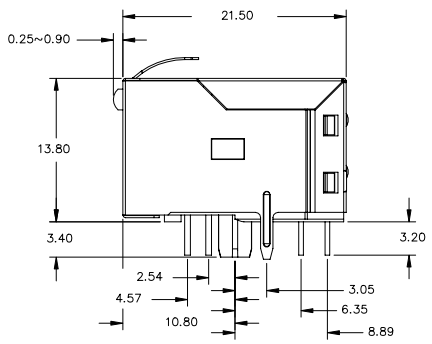


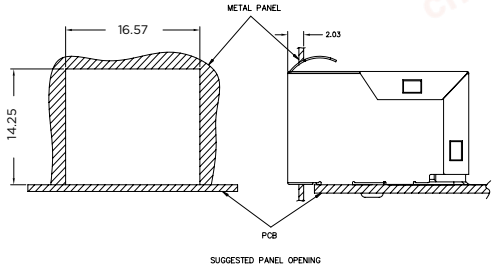


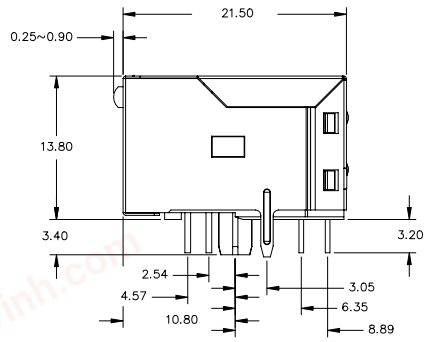
JXD1-010xNL

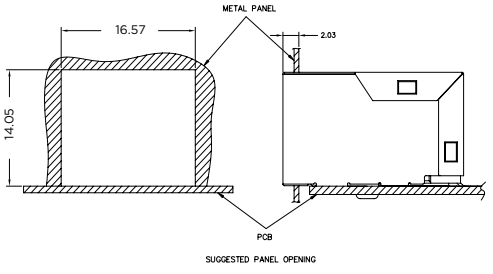


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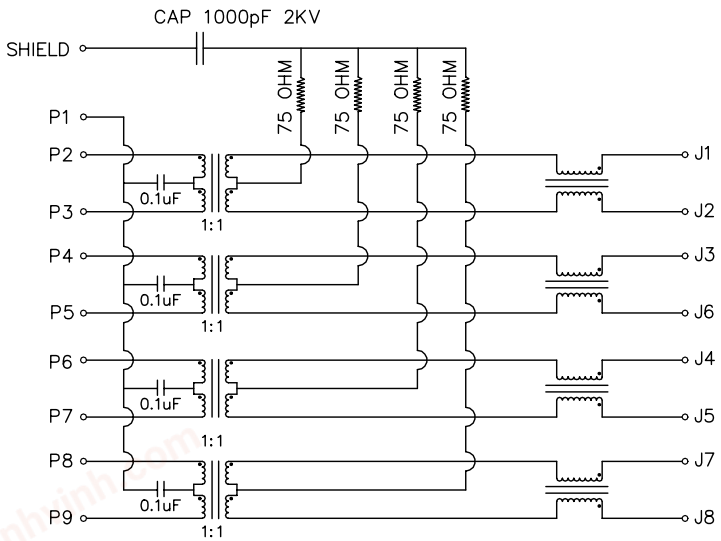
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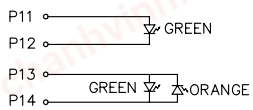
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SCHEMATICS

JXD0-0101/4/5NL



LEDs for JXD0-0101NL

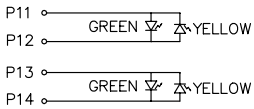


LED SPECIFICATION

STANDARD LED	WAVELENGTH	FORWARD V(MAX)	TYP
GREEN	565nm	2.4V	2.2V
ORANGE	605nm	2.5V	2.0V

*WITH A FORWARD CURRENT OF 20mA

LEDs for JXD0-0104/5NL

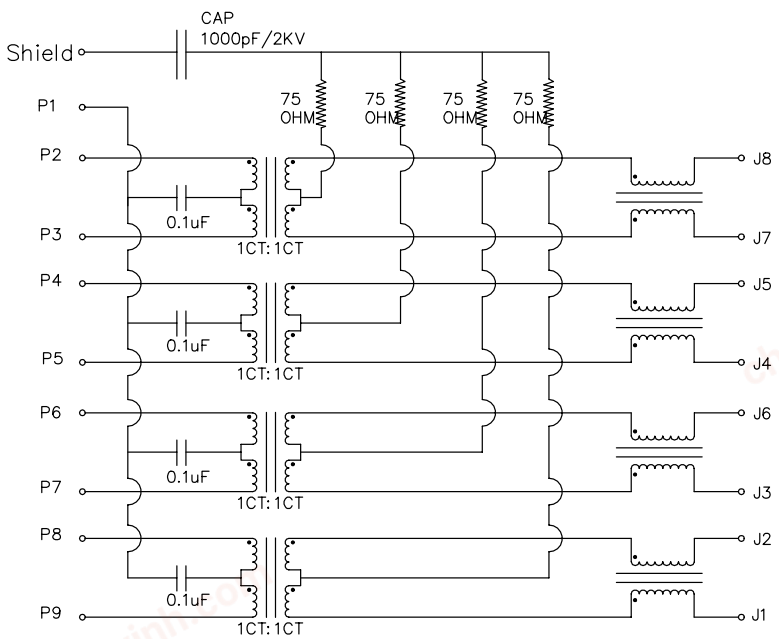


LED SPECIFICATION

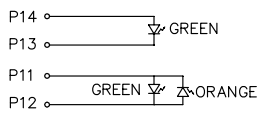
STANDARD LED	WAVELENGTH	FORWARD V(MAX)	TYP
GREEN	565nm	2.4V	2.2V
YELLOW	590nm	2.5V	2.1V

*WITH A FORWARD CURRENT OF 20mA

JXD1-0101/4/5NL



LEDs for JXD1-0101NL

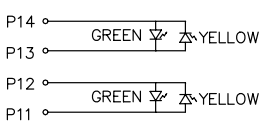


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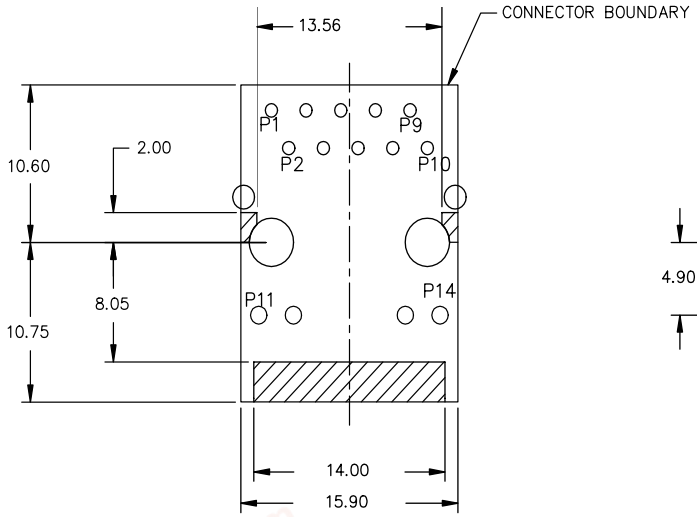
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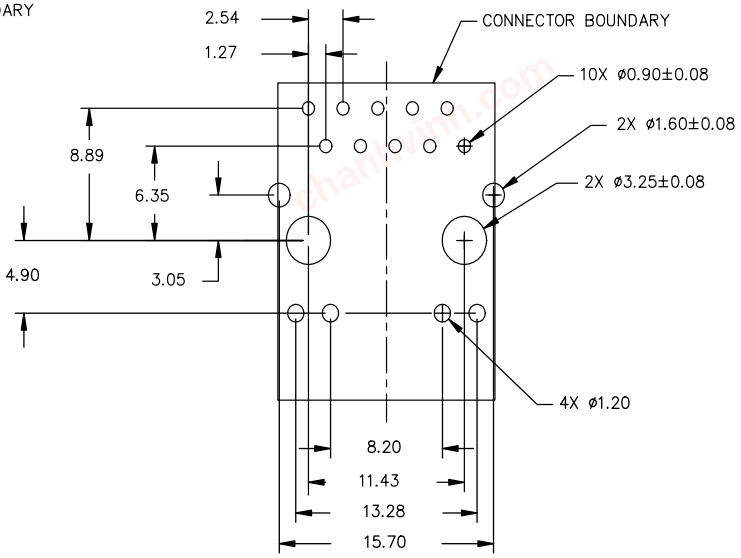
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PCB LAYOUTS

JXD0-010xNL

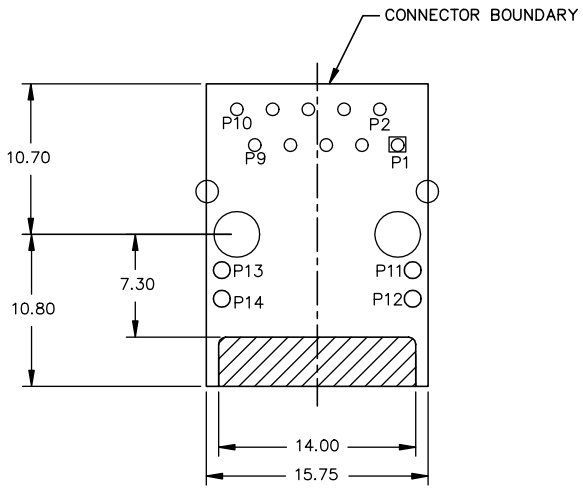


KEEP–OUT AREA (COMPONENT SIDE SHOWN)

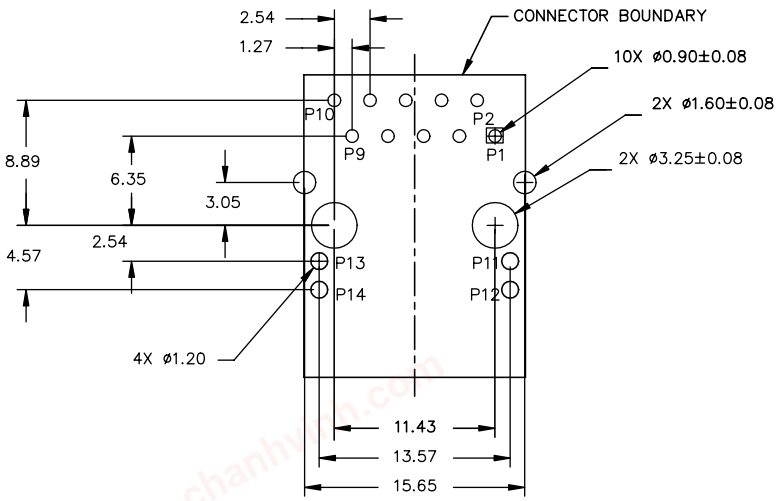


RECOMMENDED PWB LAYOUT
(COMPONENT SIDE SHOWN)

JXD1-010xNL



KEEP–OUT AREA (COMPONENT SIDE SHOWN)



RECOMMENDED PWB LAYOUT
(COMPONENT SIDE SHOWN)

For More Information:

Americas - prodinfo_network_americas@yageo.com | **Europe -** prodinfo_network_emea@yageo.com | **Asia -** prodinfo_network_asia@yageo.com

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