

# Industrial 2.5GBase-TX PulseJack™ Integrated SMD 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  $-20 + [15 \times \text{LOG}_{10} (f/40\text{MHz})]$

#### 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: solderability 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

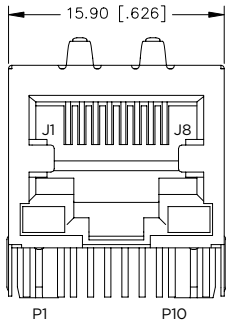
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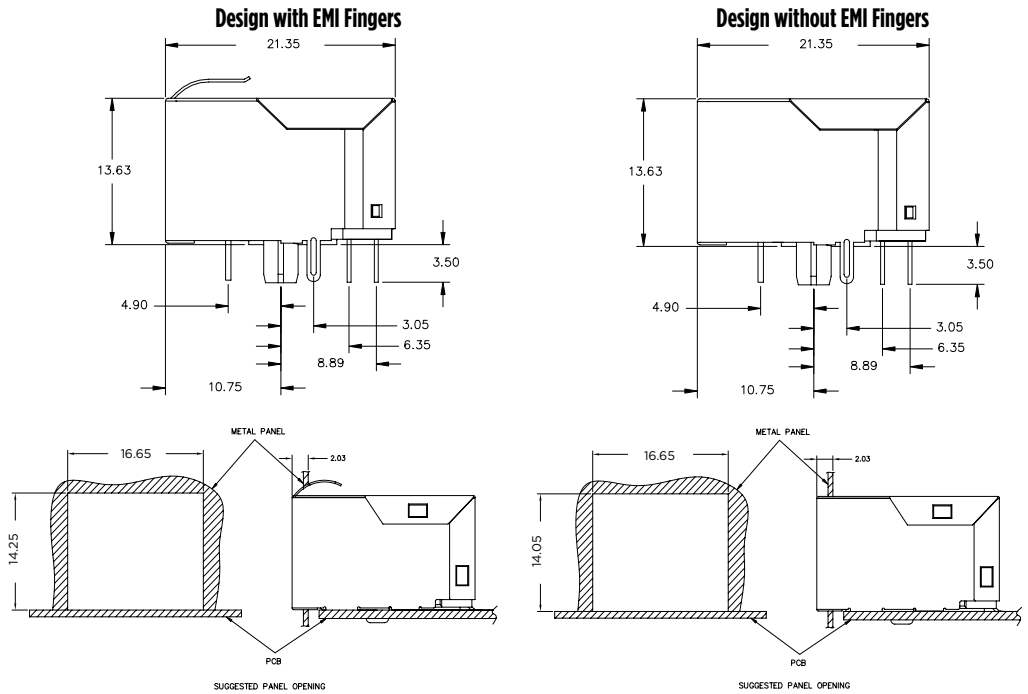


## Mechanicals

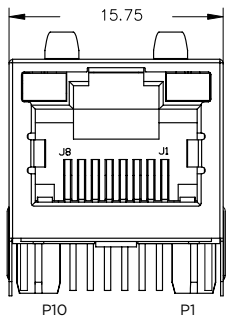
### JXD0-010xNL



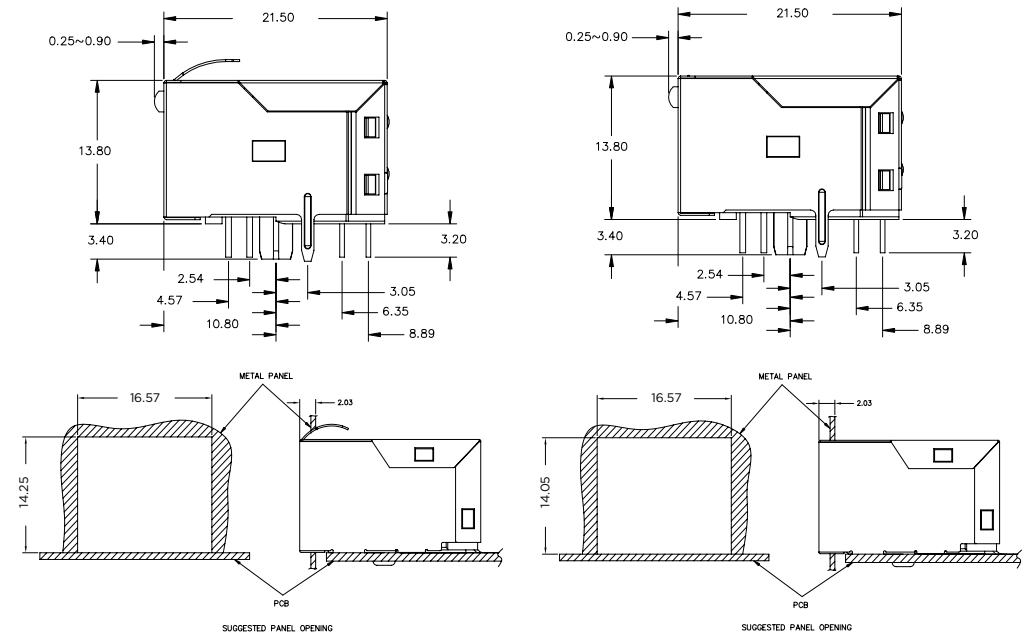
**Dimensions:**  
Unless otherwise specified,  
all tolerances are  $\pm 0,25$



### JXD1-010xNL



**Dimensions:**  
Unless otherwise specified,  
all tolerances are  $\pm 0,25$



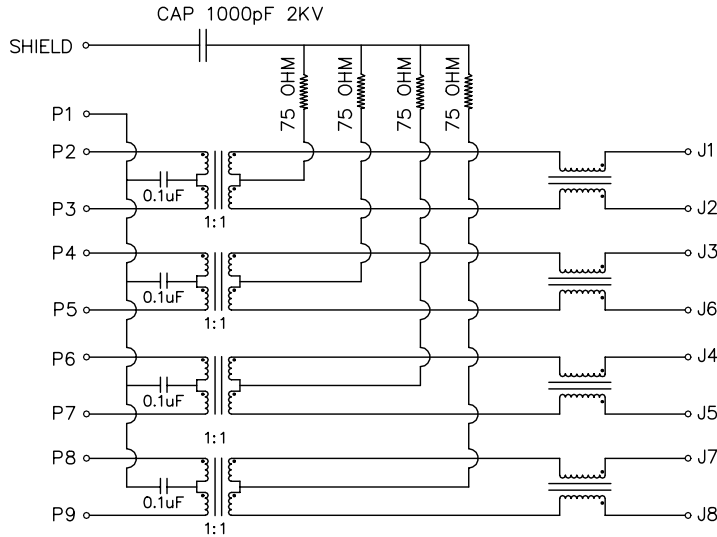
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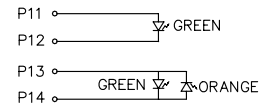


## SCHEMATICS

JXD0-0101/4/5/NL



### LEDs for JXD0-0101NL

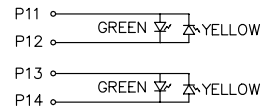


#### LED SPECIFICATION

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

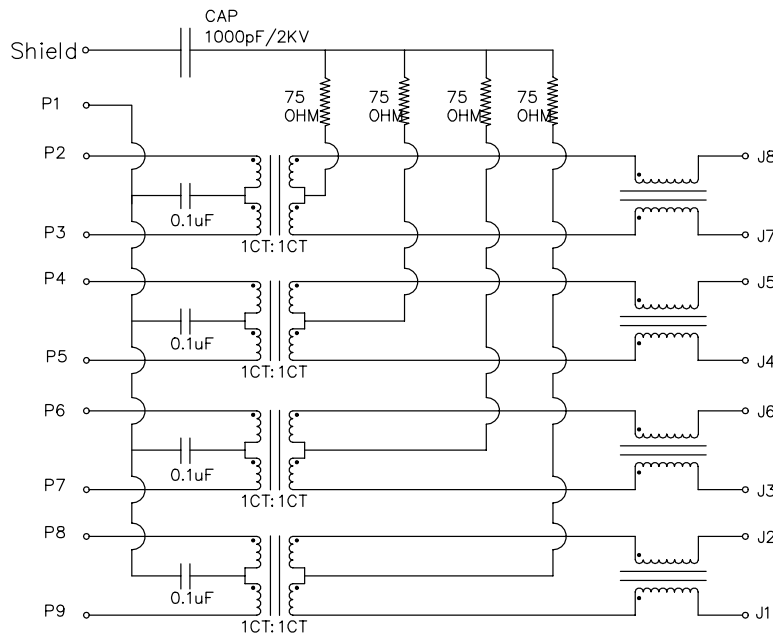


#### LED SPECIFICATION

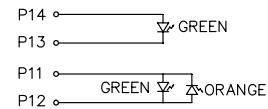
STANDARD LED	WAVELENGTH	FORWARD V(MAX)	TYP
GREEN	565nm	2.4V	2.2V
YELLOW	590nm	2.5V	2.1V

\*WITH A FORWARD CURRENT OF 20mA

JXD0-0101/4/5/NL



### LEDs for JXD1-0101NL



#### 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 JXD1-0104/5NL



#### LED SPECIFICATION

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

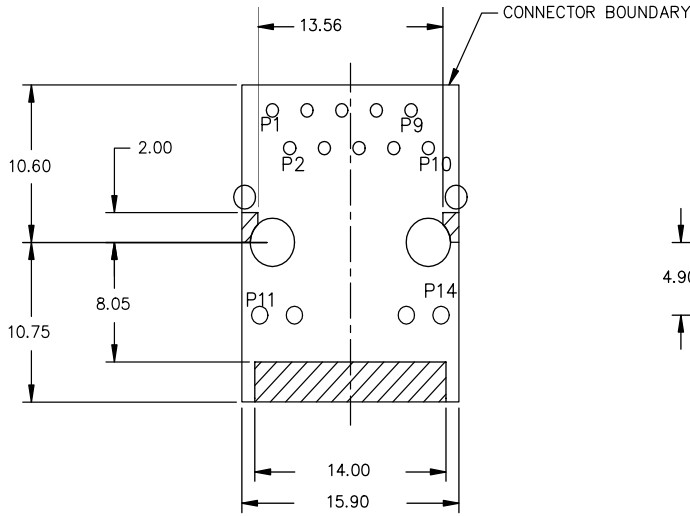
\*WITH A FORWARD CURRENT OF 20mA

# Industrial 2.5GBase-TX PulseJack™ Integrated SMD Connector

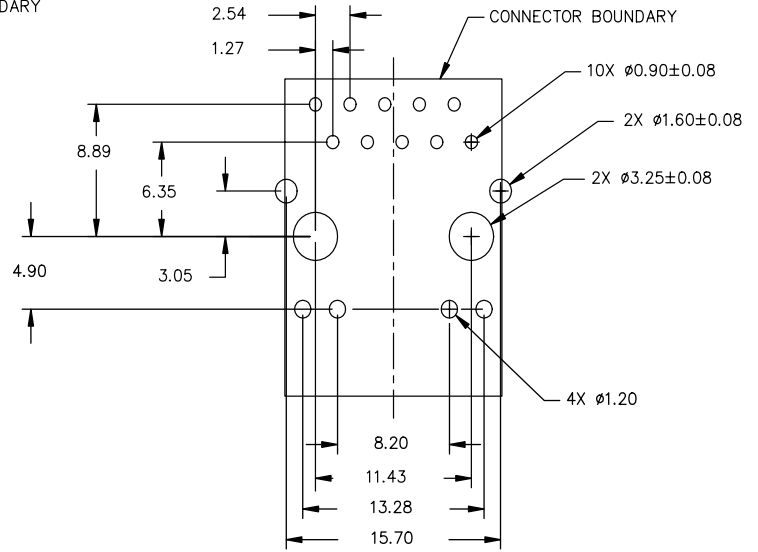
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## PCB LAYOUTS

### JXD0-010xNL

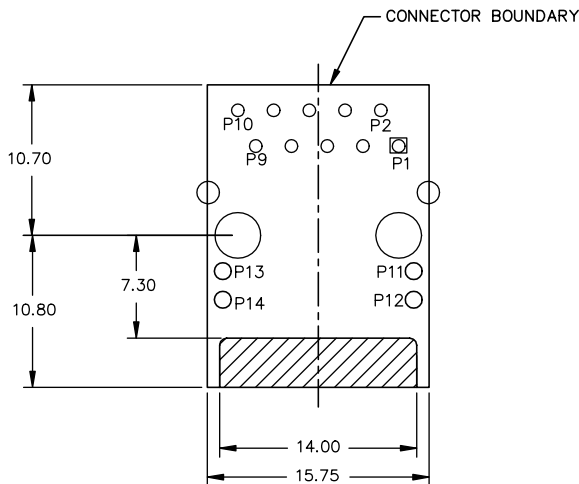


KEEP-OUT AREA (COMPONENT SIDE SHOWN)

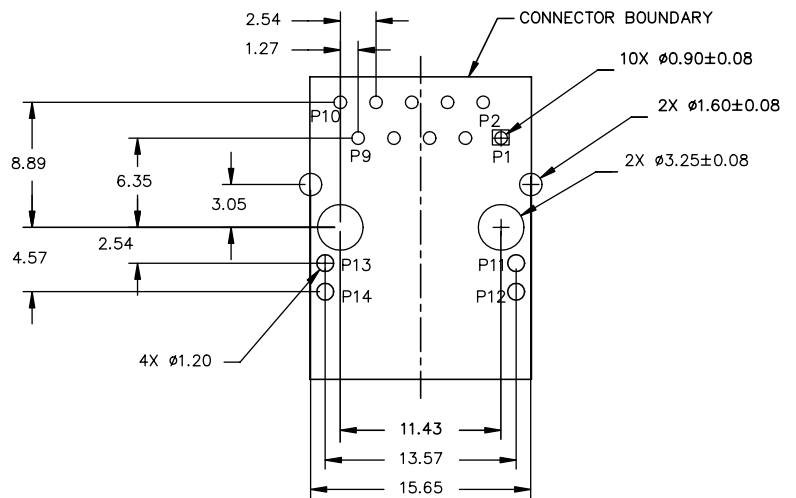


RECOMMENDED PWB LAYOUT  
(COMPONENT SIDE SHOWN)

### JXD1-010xNL



KEEP-OUT AREA (COMPONENT SIDE SHOWN)



RECOMMENDED PWB LAYOUT  
(COMPONENT SIDE SHOWN)

## For More Information:

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