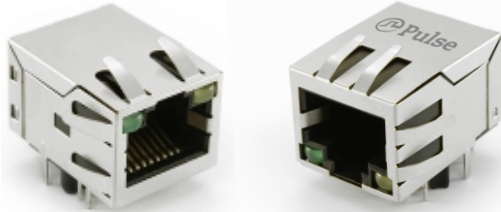


Industrial 2.5GBase-T PulseJack™ Integrated RJ45 Connector

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

YAGEO GROUP
PULSE



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 $-20 + [15 \times \log_{10} (f/40\text{MHz})]$

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

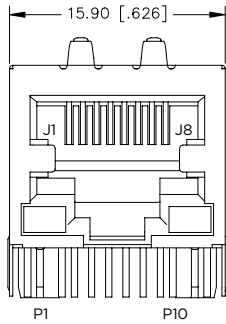
Industrial 2.5GBase-T PulseJack™ Integrated RJ45 Connector

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

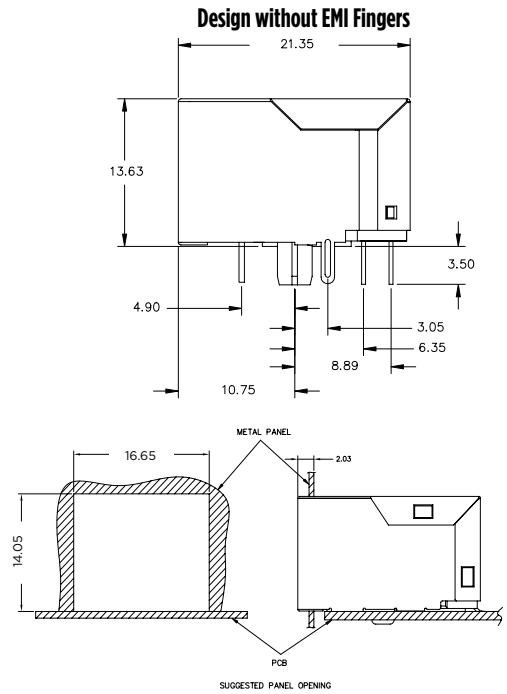
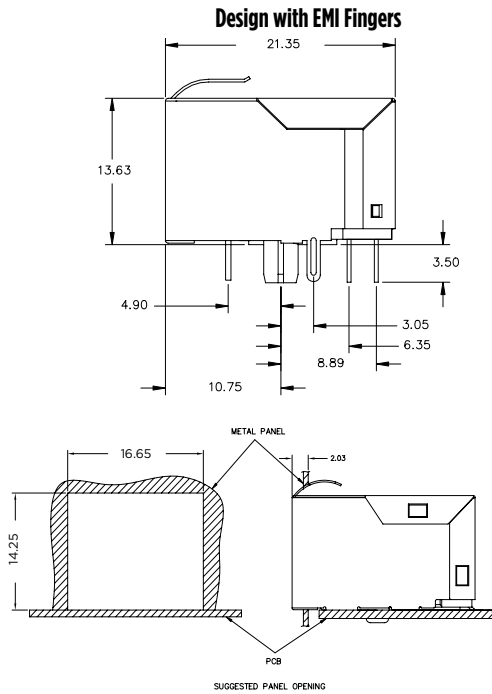


Mechanicals

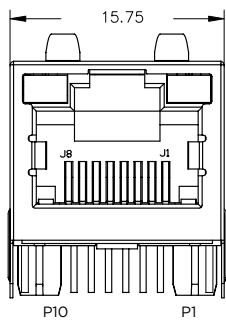
JXD0-010xNL



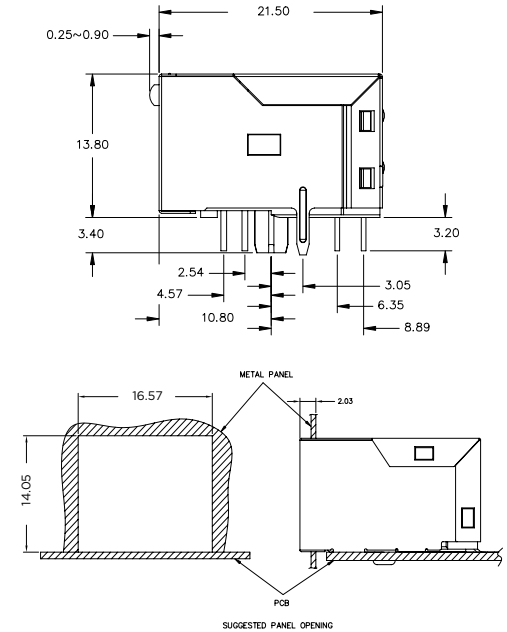
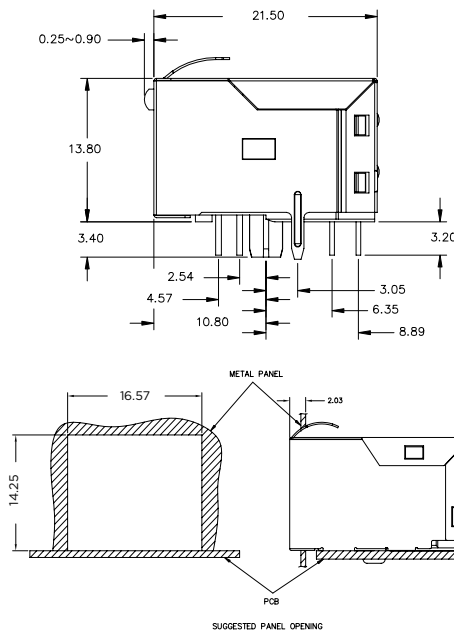
Dimensions:
Unless otherwise specified,
all tolerances are ± 0.25



JXD1-010xNL



Dimensions:
Unless otherwise specified,
all tolerances are ± 0.25



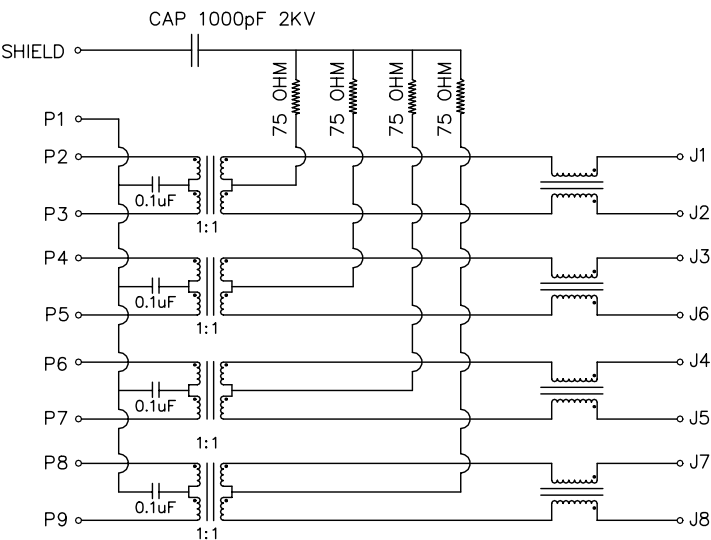
Industrial 2.5GBase-T PulseJack™ Integrated RJ45 Connector

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

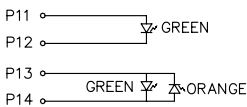


SCHEMATICS

JXD0-0101/4/5NL



LEDs for JXD0-0101NL

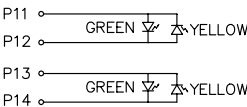


LED SPECIFICATION

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

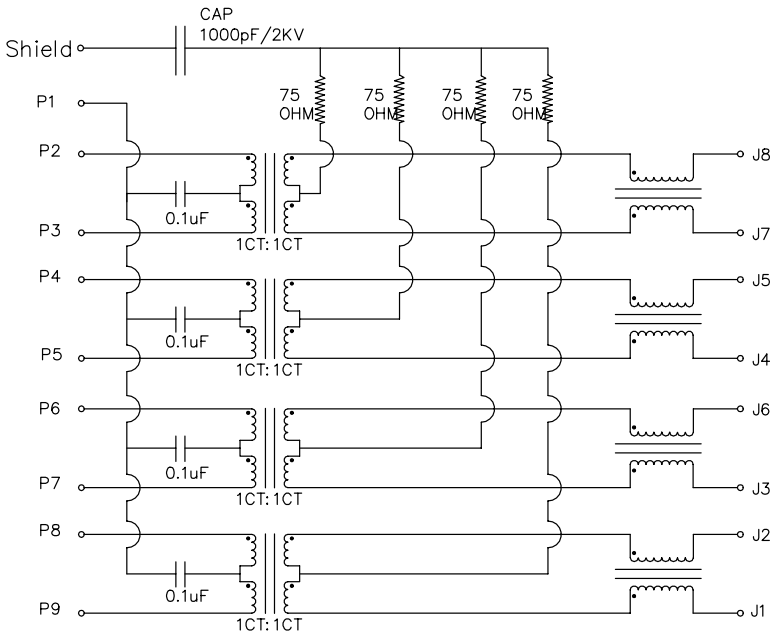


LED SPECIFICATION

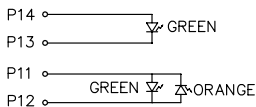
STANDARD LED	WAVELENGTH	FORWARD V(MAX)	TYP
GREEN	565nm	2.4V	2.2V
YELLOW	590nm	2.5V	2.1V

*WITH A FORWARD CURRENT OF 20mA

JXD1-0101/4/5NL



LEDs for JXD1-0101NL

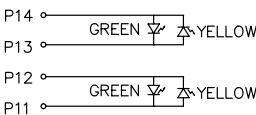


LED SPECIFICATION

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

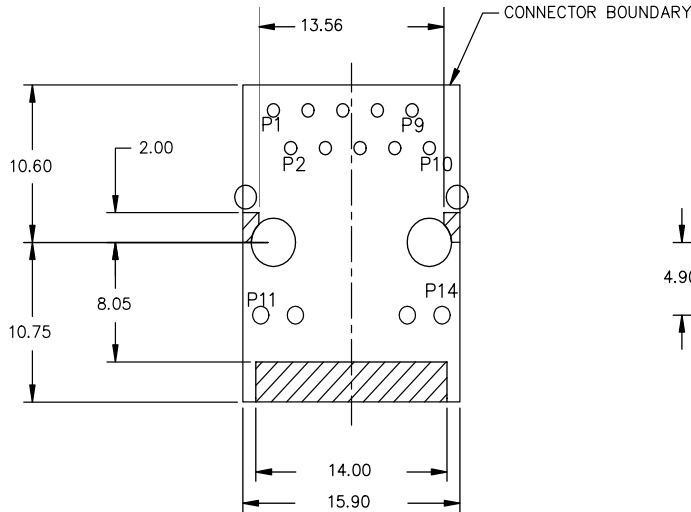
*WITH A FORWARD CURRENT OF 20mA

Industrial 2.5GBase-T PulseJack™ Integrated RJ45 Connector

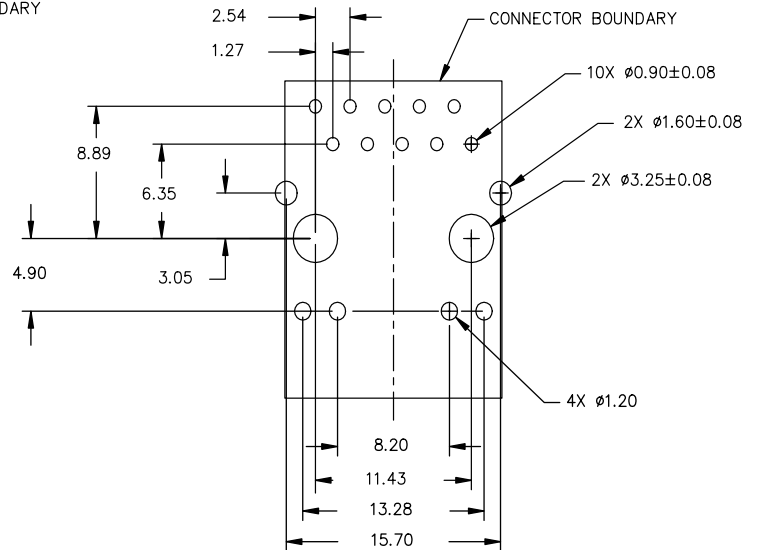
Rugged latch-up/Down design for industrial and outdoor use

PCB LAYOUTS

JXD0-010xNL

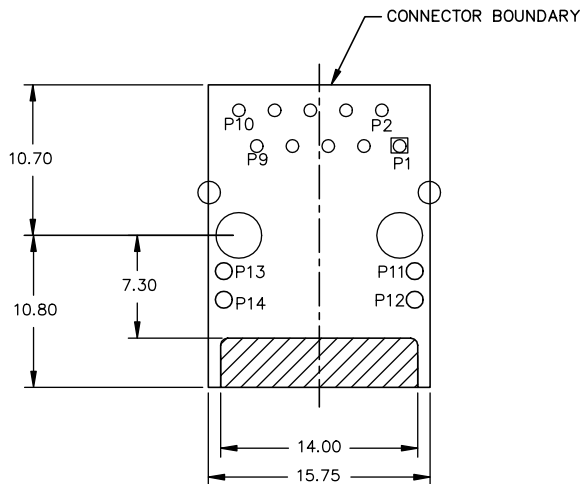


KEEP-OUT AREA (COMPONENT SIDE SHOWN)

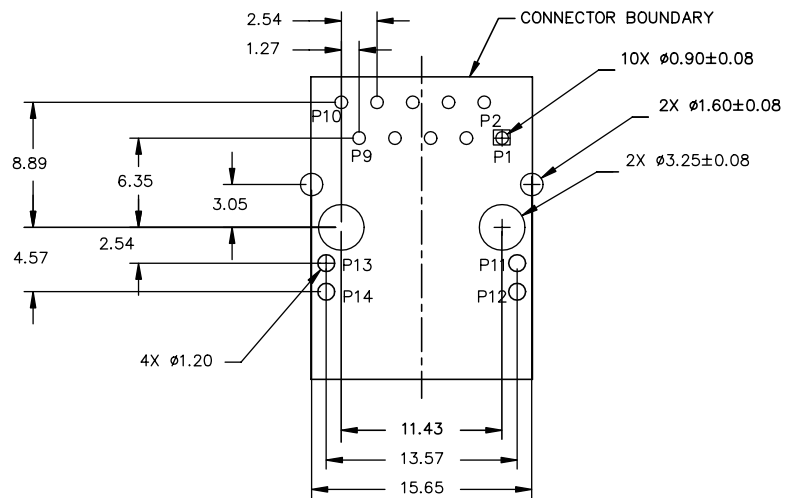


RECOMMENDED PWB LAYOUT
(COMPONENT SIDE SHOWN)

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

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, 2025. Pulse Electronics, Inc. All rights reserved.

YAGEO Corporation and its affiliates do not recommend the use of commercial or automotive grade products for high reliability applications or manned space flight.