PulseJack™

Industrial 1Gigabit Top Entry single port



Description:

Industrial Gigabit (10/100/1000Base-T) single port RJ45 vertical/ top entry integrated magnetics connector, designed to support applications, such as embedded automation and drive control, wall and panel mount HMI and outdoor networks.





- © Exceeds IEEE 802.3au specification for 1000Base-T
- ⊚ 350µH minimum OCL with 8mA bias current
- ® Rugged Industrial Temperature range -40 to+85°C
- Fully conforms to RoSH-6 without exemptions
- @ Replaces JD3/JXD3-0002NL and JD3/JXD3-0001NL

| Electrical Specifications @ 25°C - Operating Temperature -40°C to +85°C ³ | | | | | | | | | | | | | |
|--|-------------------|--------------------|----------|-------------------------------|---|--------------|--------------|------------------------|-------------|--------------|--------------------------------------|----------------|---------|
| Part Number | LEDs ¹ | ¹ Speed | EMI Tabs | Insertion Loss max (dB) | Return Loss (dB MIN) 100Ω ($\pm 15\Omega$) | | | Cross Talk (dB TYP) | | | Common Mode Rejection (dB TYP) | Hipot (MIN) | |
| | | | | 1-125 MHZ | 1-40 MHz | 40-60 MHz | 60-80 MHz | 80-100 MHz | 1-10 MHz | 32-65 MHz | 65-100 MHz | 1-100 MHz | 60 Secs |
| JXD3-0Z02NL | Y/G | 10/100/1000BT | N/A | -1.2 | -16 | -12 | -10 | -8 | -40 | -35 | -30 | -30 | 2250VDC |

Notes: 1. LEDs Left/Right G = green, Y = yellow

| | | RJ45 Durability Testing Rating | | | |
|--------------------------------|-------------------|--------------------------------|----------------|---------------------------------|--|
| Part Number Mating Force (MAX) | | Unmating Force (MAX) | Durability | Plug to Jack Retention (MIN) | |
| JXD3 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 | | MSL² |
| | Material | Finish | Material | Plating Area | Solder Area | Material | Specification | Rating |
| JXD3 Series | Copper Alloy | $30\text{-}50\mu$ inches thick nickel | Phosphor Bronze | 30μ inches gold over 50μ inches nickel | Tin matte finish over nickel | Thermoplastic | UL 94 V-0 | 1 |

Notes: 1. Connector dimensions comply with FCC dimension requirements.

2. MSL - Moisture Sensitivity Level

3. Storage Temperature ; -40 to +85°C

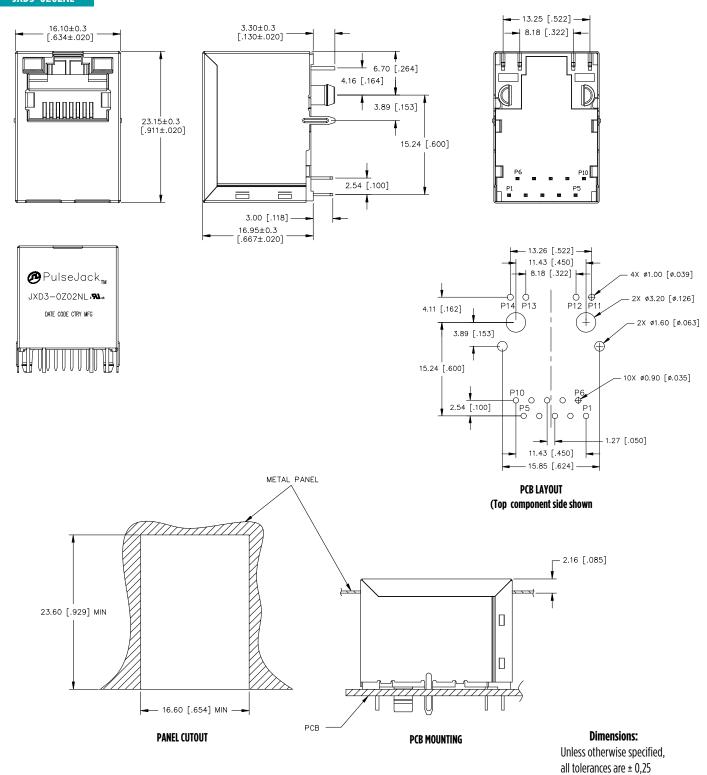
PulseElectronics.com J50X.A (06/22)



MECHANICALS

JXD3-0Z02NL

2



PulseElectronics.com J50X.A (06/22)

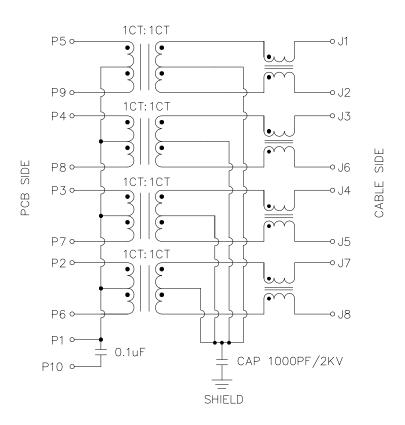
PulseJack™

Industrial 1Gigabit Top Entry single port



SCHEMATICS

JXD3-0Z02NL



JXD3-0Z02NL LED's





| EMITTED COLOR | GREEN | YELLOW | | |
|-----------------------------|------------|------------|--|--|
| WAVELENGTH (nM) | 570 | 590 | | |
| POWER DISSIPATION (Pd) | 105 mW MAX | 105 mW MAX | | |
| DC FORWARD CURRENT | 20 mA MAX | 20 mA MAX | | |
| Ir @ Vr = 5V | 10uA Max | 10uA Max | | |
| FOWARD VOLTAGE (VF) @ 20 mA | 1.8 ~2.4V | 2.1V TYP | | |

Note: Per Vendor Specification

For More Information:

Americas - prodinfo_network_americas@yageo.com | Europe - prodinfo_network_emea@yageo.com | Asia - prodinfo_network_apac@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, 2022. Pulse Electronics, Inc. All rights reserved.

