

Features and Benefits:

- Ⓢ Complete Connector and magnetics in one package
- Ⓢ IEEE802.3 compliant with 350uH at 8mA DC bias for 10/100Base-Tx (with PoE option) and 1000Base-T
- Ⓢ Compatible with market leading Ethernet PHYs
- Ⓢ Rugged design for outdoor and industrial use
- Ⓢ Fully RoHS and Lead Free compliant
- Ⓢ IR Reflow and Wave solder compatible

Electrical Specifications @ 25°C - Operating Temperature -40°C to +85°C

Part Number	Data Rate	Turns Ratio	LED Configuration (L/R)	EMI Fingers Configuration	Design Style	Isolation (Pri:Sec)	Possible replacement to older design
JXD1-1020NL	100Base-TX	1.00 +/- 3%	Yellow /Green	None	2W CMC on TX	2250VDC / 60sec	None
JXD1-1025NL	100Base-TX	1.00 +/- 3%	Yellow /Green	None	2W CMC on RX	2250VDC / 60sec	4 Pair 30W
JXD1-1022NL	1000Base-T	1.00 +/- 3%	Yellow /Green	None	3W CMC on PHY side	2250VDC / 60sec	None

100Base-TX

Electrical Specifications @ 25°C - Operating Temperature -40°C to +85°C

Part Number	Insertion Loss (MAX)	Return Loss (MIN)			Crosstalk (MIN)			CMRR (MIN)	DCR (J1-J2), (J3-J6)
	1 - 100MHz	1 - 30MHz	30 - 60MHz	60 - 80MHz	1MHz	30 - 60MHz	100MHz	1 - 100MHz	
JXD1-1020NL	-1.2dB	-16dB	-12dB	-10dB	-35dB	-30dB	-30dB	-30dB	1.2 OHM max
JXD1-1025NL	-1.2dB	-16dB	-12dB	-10dB	-35dB	-30dB	-30dB	-30dB	1.2 OHM max

1000Base-T

Electrical Specifications @ 25°C - Operating Temperature -40°C to +85°C

Part Number	Insertion Loss (MAX)	Return Loss (MIN)			Crosstalk (MIN)			CMRR (MIN)	DCR (J1-J2), (J3-J6) (J4-J5), (J7-J8)
	1 - 125MHz	1 - 30MHz	30 - 80MHz	80 - 100MHz	1MHz	30 - 60MHz	100MHz	1 - 100MHz	
JXD1-1022NL	-1.2dB	-18dB	-12dB	-10dB	-38dB	-33dB	-30dB	-30dB	1.2 OHM max

Notes:

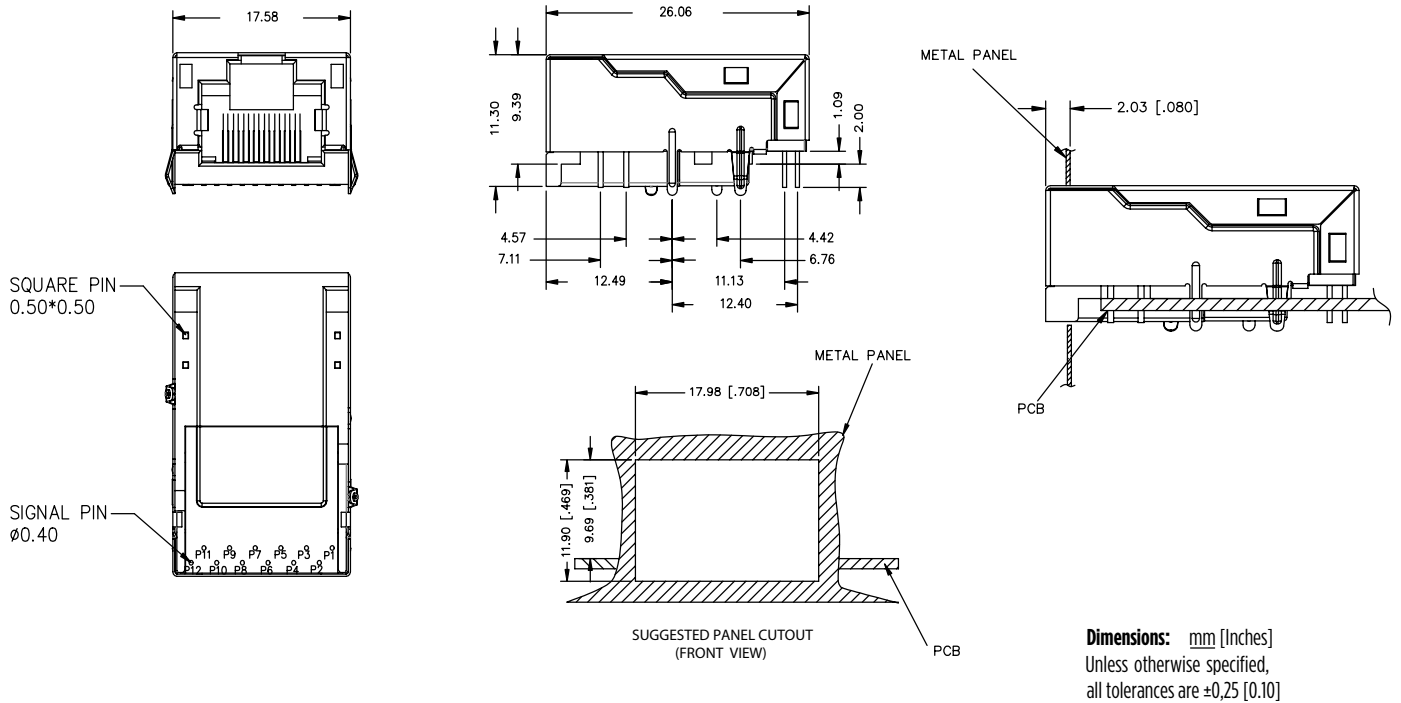
1. ROHS Compliant:
2. Plastic housing: LCP material with flammability rating UL94V-0
3. Contacts plating: 30 micro-inch gold plating
4. Contacts base material: Phosphor bronze
5. Under plating: 50u inches min nickel
6. Solder Tail Plating: 100 min u inches 100% tin, matte finish
7. Metal shield - nickel plating on Brass
8. Jack cavity conforms to FCC part 68 subpart
9. PCB plating: HASL
10. Storage temperature: -40°C to 85°C
11. All parts are shipped in trays with 50pcs/tray - see page4 for details
12. 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: W2, 270°C maximum through wave solder
 - D. J-STD-075: R7, 245°C maximum through reflow solder process

RJ45 Connector performance:

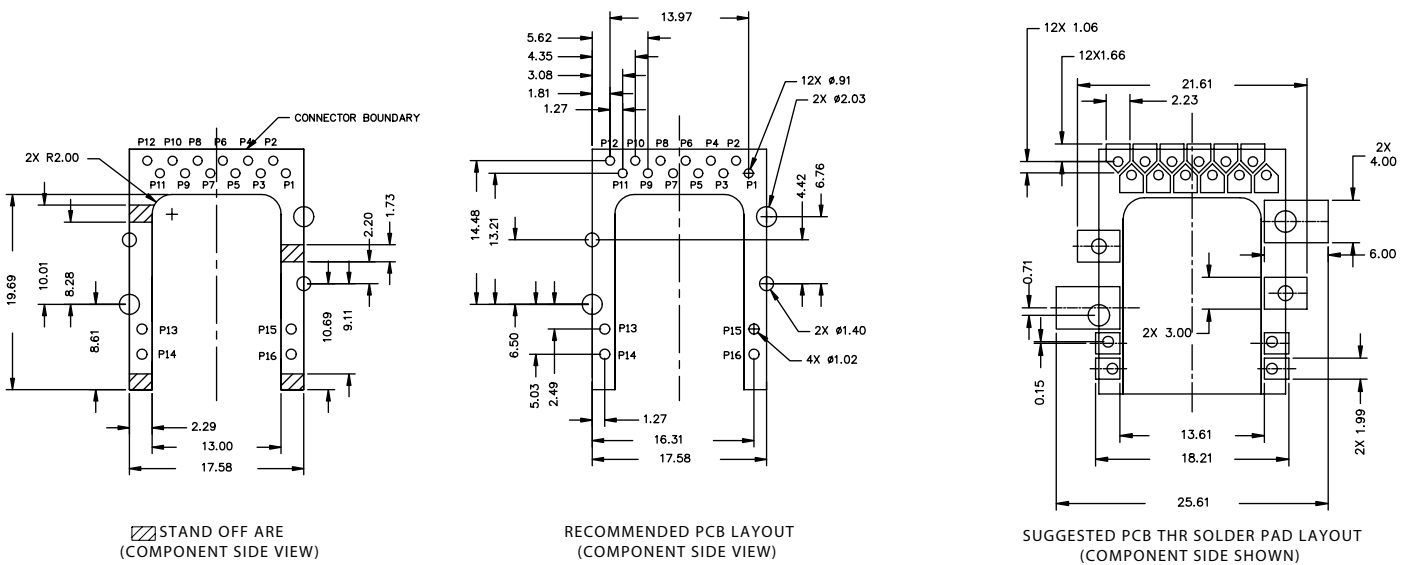
- Insulation Resistance : 500M Ohms Min
- Insertion force with the latch depressed : 22N Max
- Removal force with the latch depressed : 44N Max
- Durability : 750 Cycles

MECHANICALS

JXD1-102xNL

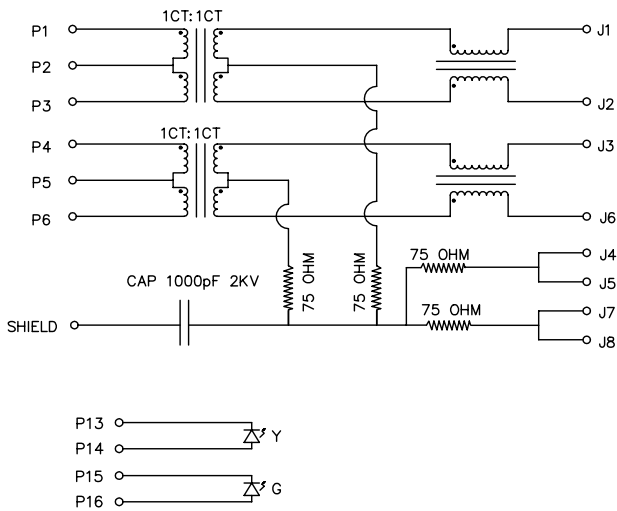


RECOMMENDED LAYOUT AND FOOTPRINT

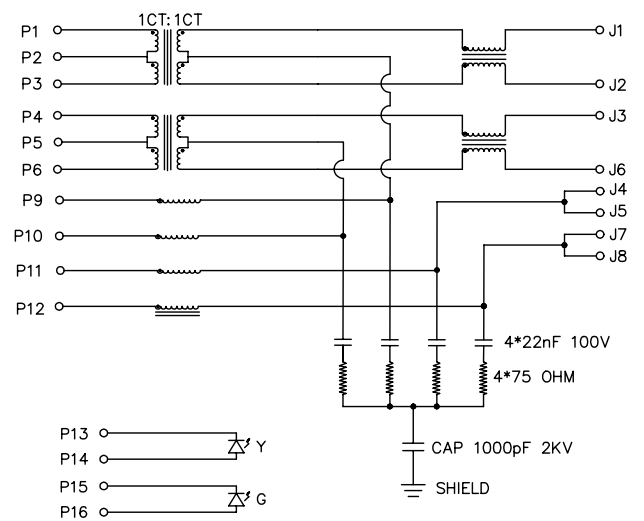


SCHEMATICS

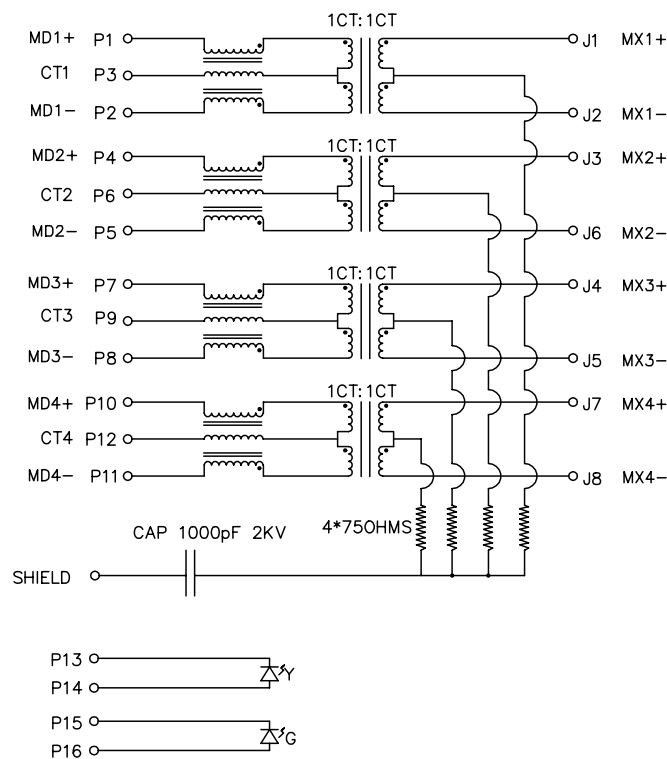
JXD1-020NL



JXD1-1025NL



JXD1-1022NL

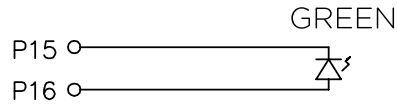
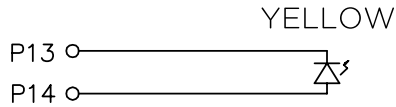


Rugged design for fast Ethernet and 1Gigabit connectivity

Industrial THR, Mid-Mount PulseJack™ Integrated Connector

LED SCHEMATICS

JXD1-1020/22/25NL

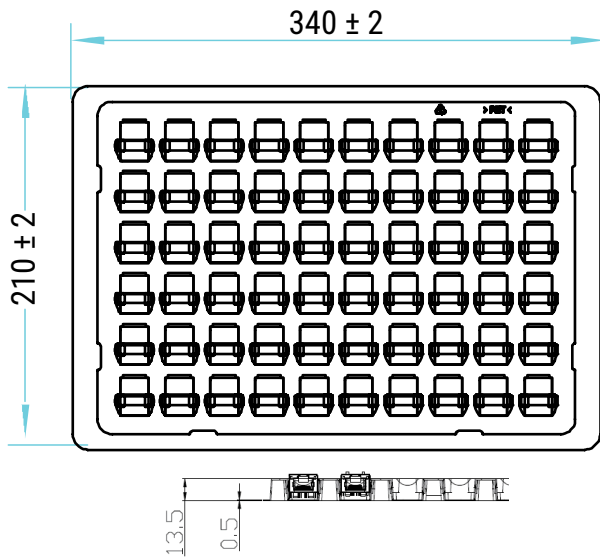


LED SPECIFICATION

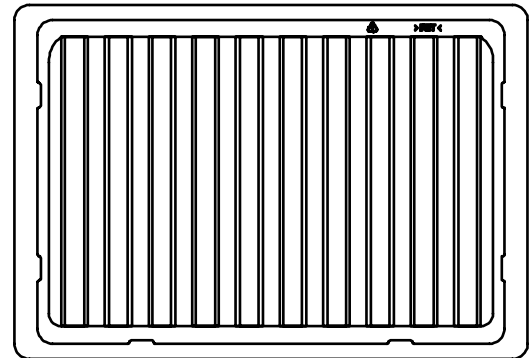
EMITTING COLOR	λ_p (nm)	$V_f@I_f=20mA$	$I_r @V_r=5V$
GREEN	570	1.7V-2.6V	10 μ A max.
YELLOW	590	1.7V-2.6V	10 μ A max.

PACKING DETAILS

COMPONENT PACKING TRAY



TOP PACKING COVER



1. **Material:** Conductive PET, 0.5mm thick
2. **Components per Tray:** 60pcs
3. **Quantity per box:** 124xTray = 540pcs

For More Information:

Americas - prodinfonetworkamericas@yageo.com | Europe - prodinfonetworkemea@yageo.com | Asia - prodinfonetworkapac@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.