

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:

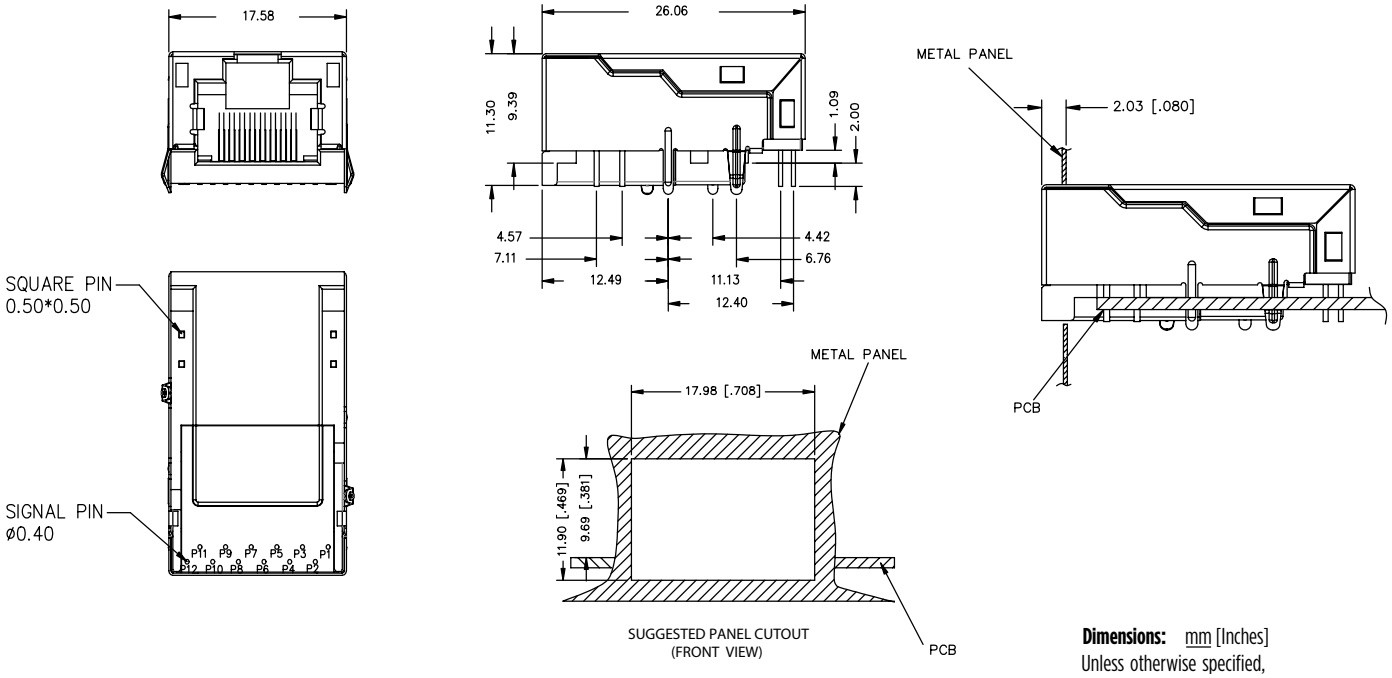
1. ROHS Compliant:
2. Plastic housing: LCP material with flammability rating UL94V-0
3. Contacts plating: 30 micro-inch gold plating
4. Contacts base material: Phosphor bronze
5. Under plating: 50u inches min nickel
6. Solder Tail Plating: 100 min u inches 100% tin, matte finish
7. Metal shield - nickel 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: solderabilitiy 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

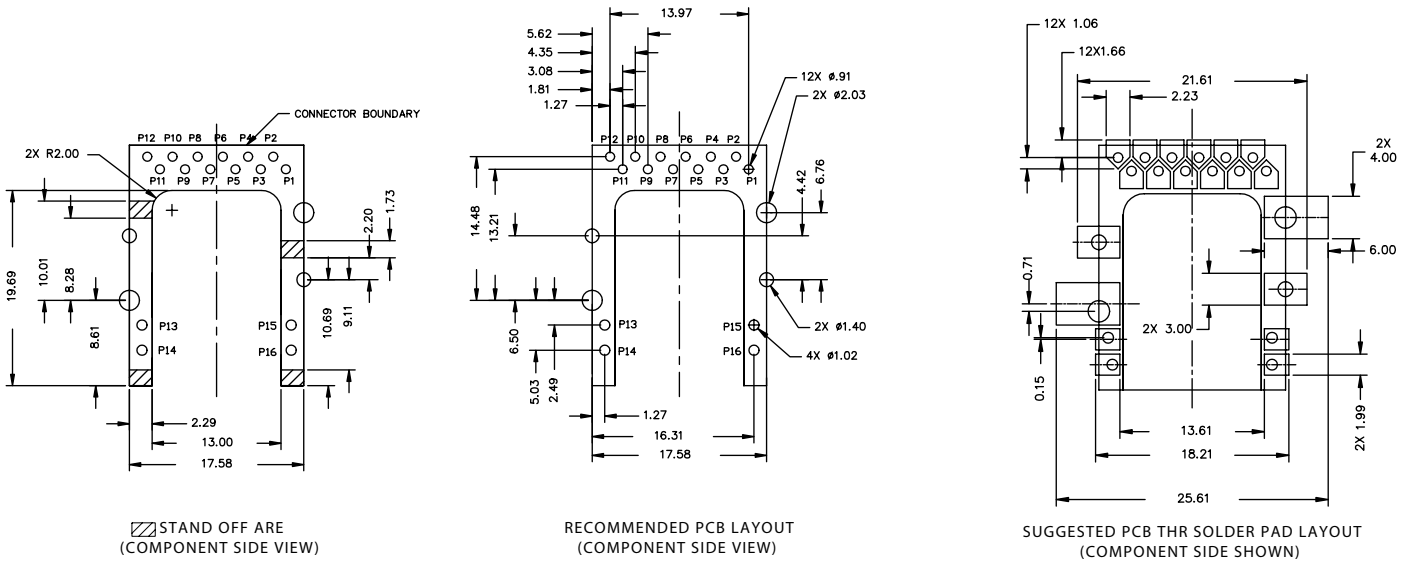
MECHANICALS

JXD1-102xNL



Dimensions: mm [Inches]
Unless otherwise specified,
all tolerances are ±0,25 [0.10]

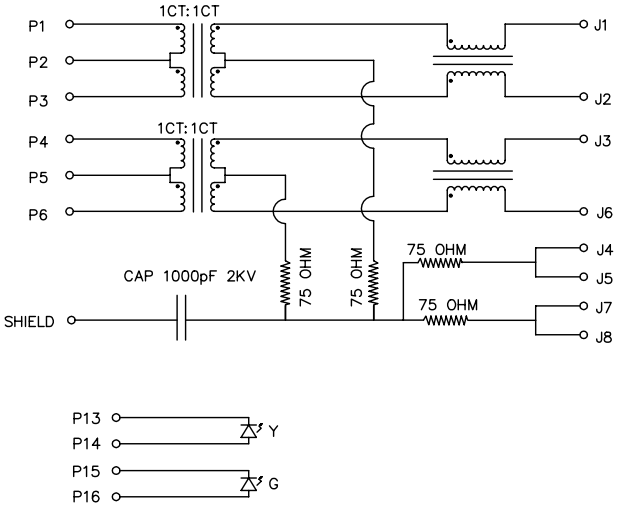
RECOMMENDED LAYOUT AND FOOTPRINT



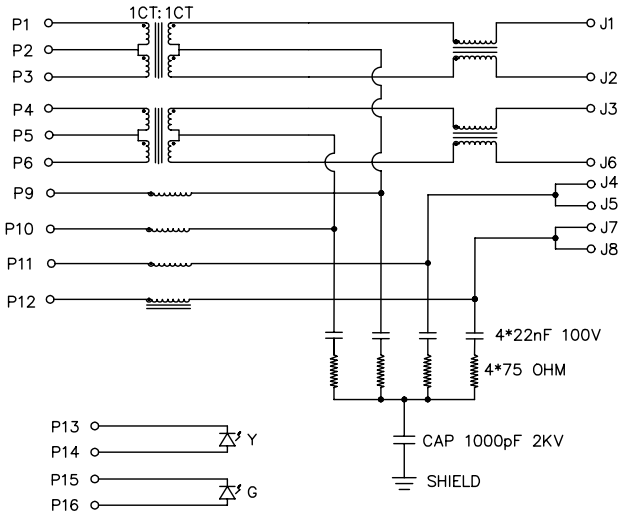
Dimensions: mm
Unless otherwise specified, all tolerances are ±0,25 [0.10]

SCHEMATICS

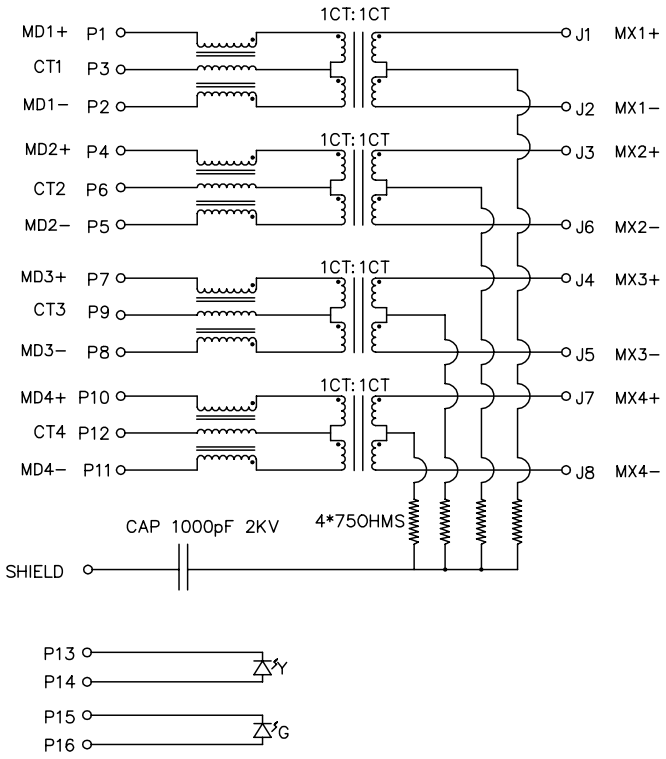
JXD1-020NL



JXD1-1025NL



JXD1-1022NL



LED SCHEMATICS

JXD1-1020/22/25NL

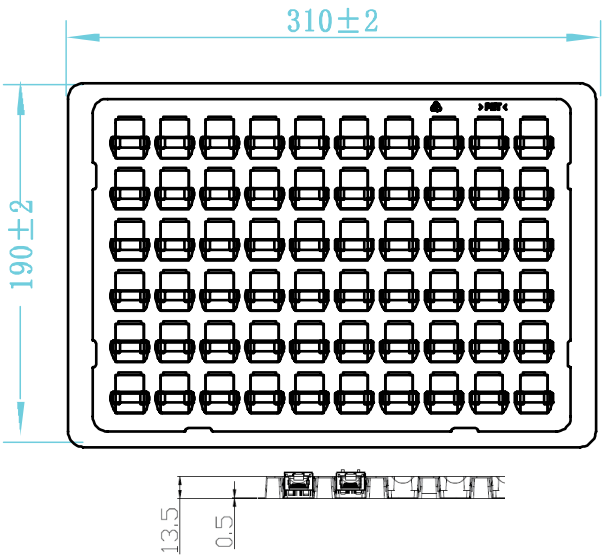


LED SPECIFICATION

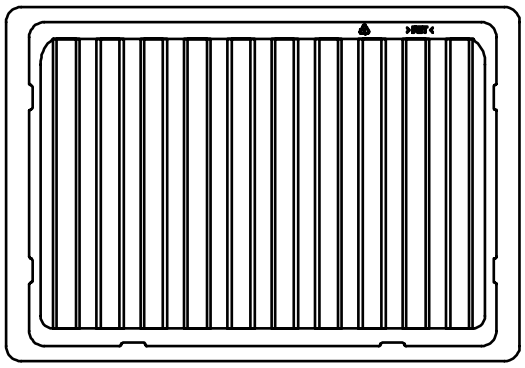
EMITTING COLOR	λp (nm)	Vf@If=20mA	Ir @Vr=5V
GREEN	570	1.7V~2.6V	10μA max.
YELLOW	590	1.7V~2.6V	10μA max.

PACKING DETAILS

COMPONENT PACKING TRAY



TOP PACKNG COVER



1. **Material:** Conductive PET, 0.5mm thick
2. **Components per Tray:** 60pcs
3. **Quantity per box:** 9xTray = 540pcs

For More Information:
Americas - prodinfonetworkamericas@yageo.com | **Europe -** prodinfonetworkemea@yageo.com | **Asia -** prodinfonetworkapac@yageo.com

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