

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:

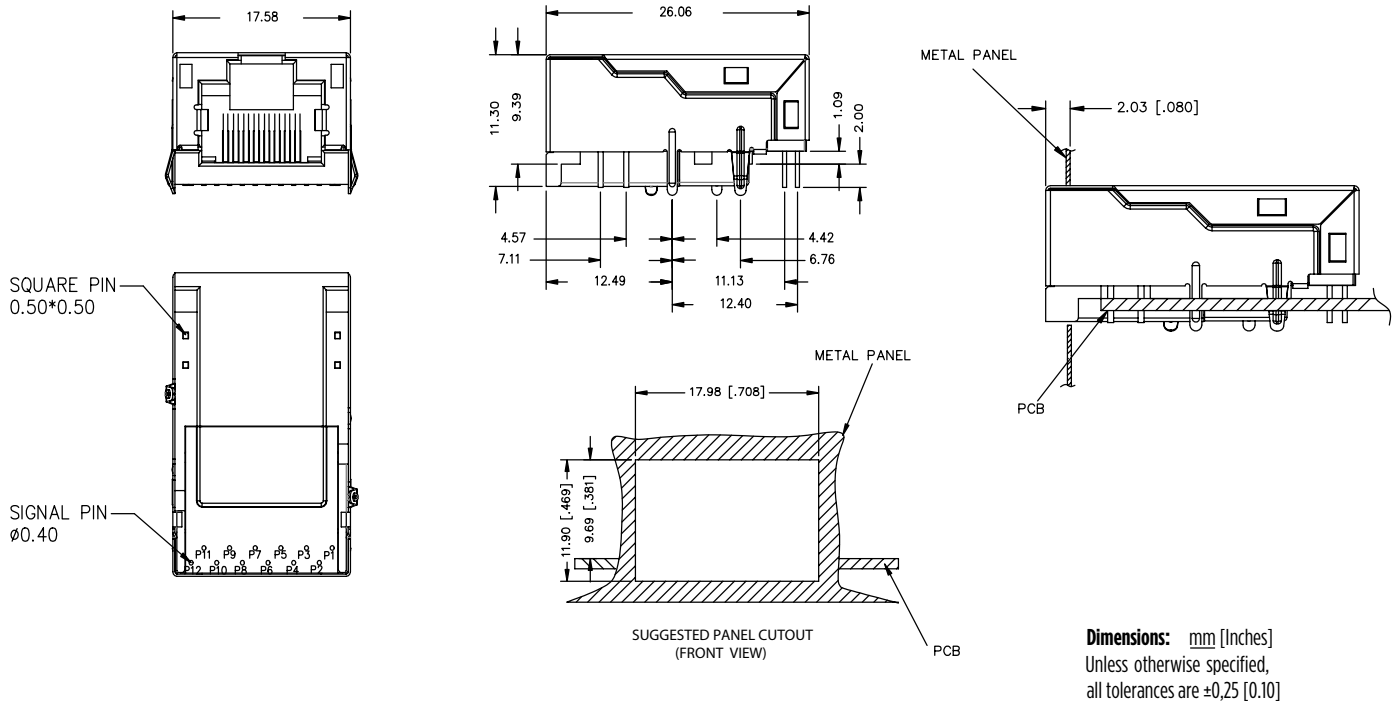
1. ROHS Compliant:
2. Plastic housing: LCP material with flammability rating UL94V-0
3. Contacts plating: 30 micro-inch gold plating
4. Contacts base material: Phosphor bronze
5. Under plating: 50u inches min nickel
6. Solder Tail Plating: 100 min u inches 100% tin, matte finish
7. Metal shield - nickel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

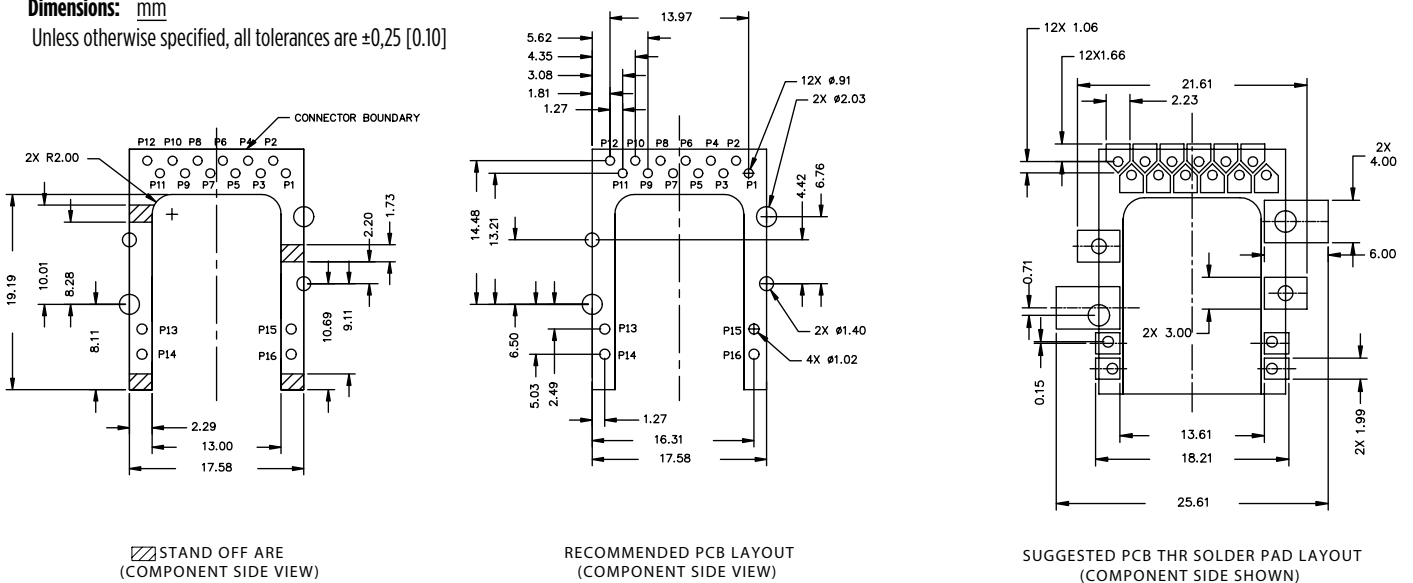
JXD1-102xNL



RECOMMENDED LAYOUT AND FOOTPRINT

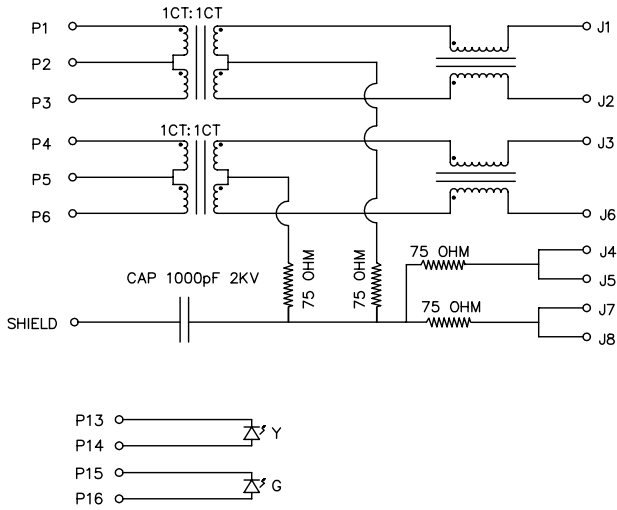
Dimensions: mm

Unless otherwise specified, all tolerances are ±0.25 [0.10]

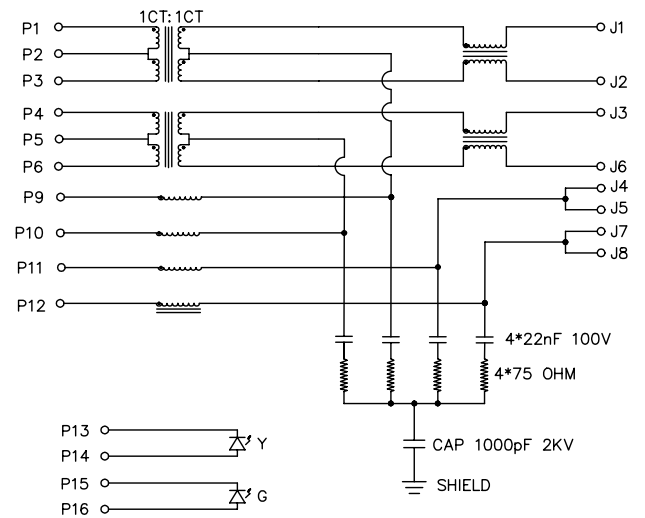


SCHEMATICS

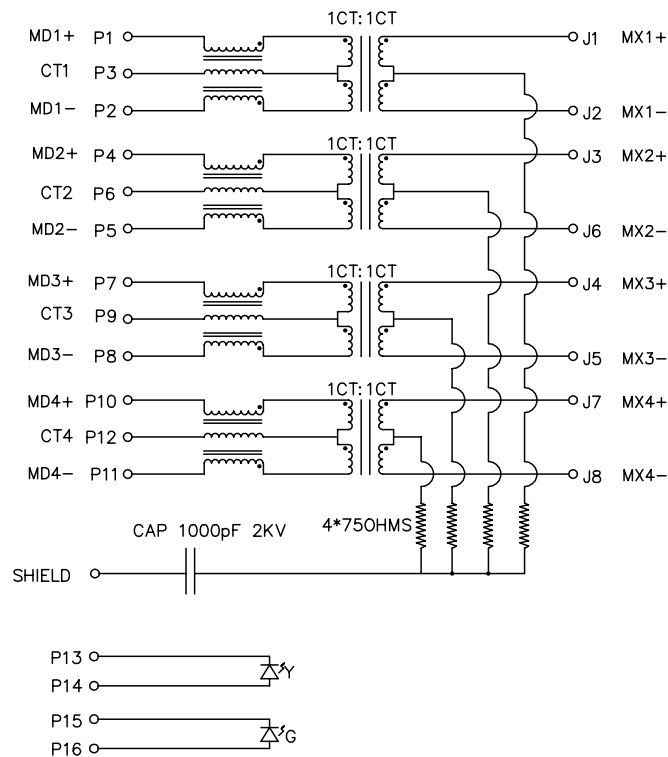
JXD1-020NL



JXD1-1025NL



JXD1-1022NL



LED SCHEMATICS

JXD1-1020/22/25NL

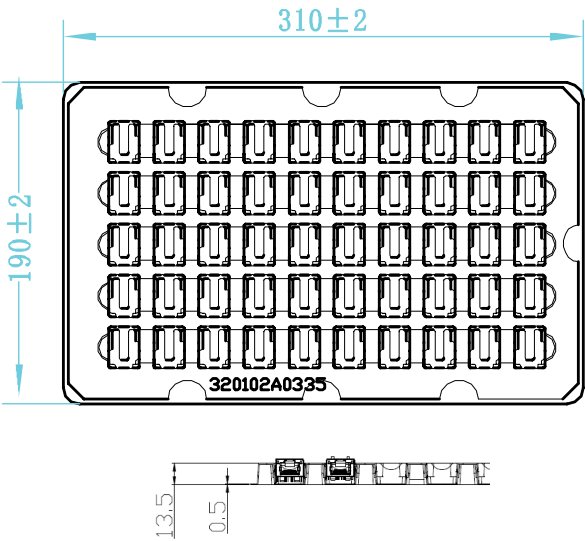


LED SPECIFICATION

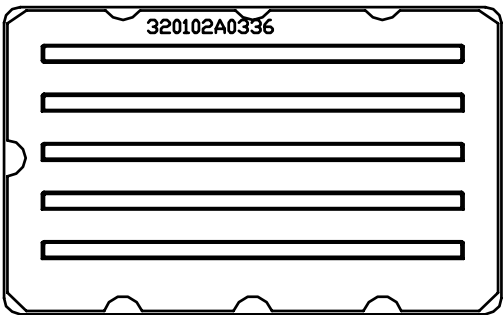
EMITTING COLOR	λ_p (nm)	$V_f@I_f=20mA$	$I_r @V_r=5V$
GREEN	570	1.7V-2.6V	10 μ A max.
YELLOW	590	1.7V-2.6V	10 μ A max.

PACKING DETAILS

COMPONENT PACKING TRAY



TOP PACKING COVER



1. **Material:** Conductive PET, 0.5mm thick
2. **Components per Tray:** 50pcs
3. **Quantity per box:** 124xTray = 1200pcs

For More Information:

Americas - prodinfo@networkamericas.yageo.com | Europe - prodinfo@networkemea.yageo.com | Asia - prodinfo@networkapac.yageo.com

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