

# Industrial Low profile PulseJack™ Integrated Connector

Rugged design for fast Ethernet and 1Gigabit connectivity



- Ⓢ Fully compliant to IEEE802.3 for 10/100/1000Base-T
- Ⓢ Open Inductance 350uH @ 8mA
- Ⓢ Compatible with market leading PHYs
- Ⓢ Rugged design for outdoor and industrial use
- Ⓢ Fully RoHS and Lead Free compliant-No exemptions
- Ⓢ Peak wave solder temperature 260°C

### 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-IV07NL	100Base-TX	1.00 +/- 3%	Green-Orange/Yellow	Top and Side	3W CMC on TX	2250VDC / 60sec	JOG-0007NL
JXD1-IV17NL	100Base-TX	1.00 +/- 3%	Green-Orange/Yellow	None	2W CMC on RX	2250VDC / 60sec	NEW
JXD1-IV09NL	1000Base-T	1.00 +/- 3%	Green-Orange/Yellow	Top and Side	3W CMC on PHY side	2250VDC / 60sec	JOG-0009NL

Recommended replacements for older PulseJack latch-up products - JOG-00xxNL

### 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-IV07NL	-1.0dB	-18dB	-16dB	-12dB	-35dB	-30dB	-30dB	-30dB	1.2 OHM max
JXD1-IV17NL	-1.0dB	-18dB	-16dB	-12dB	-35dB	-30dB	-30dB	-30dB	1.2 OHM max

### 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 - 60MHz	60 - 100MHz	1MHz	30 - 60MHz	100MHz	1 - 100MHz	
JXD1-IV09NL	-1.2dB	-18dB	-16dB	-10dB	-38dB	-33dB	-30dB	-30dB	1.2 OHM max

#### Notes:

1. ROHS Compliant:
2. Plastic housing: thermoplastic material with flammability rating UL94V-0 or better
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 Stainless Steel
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: W2, 270°C maximum through wave solder
12. All parts are shipped in trays with 60pcs/tray - see page4 for details

#### 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

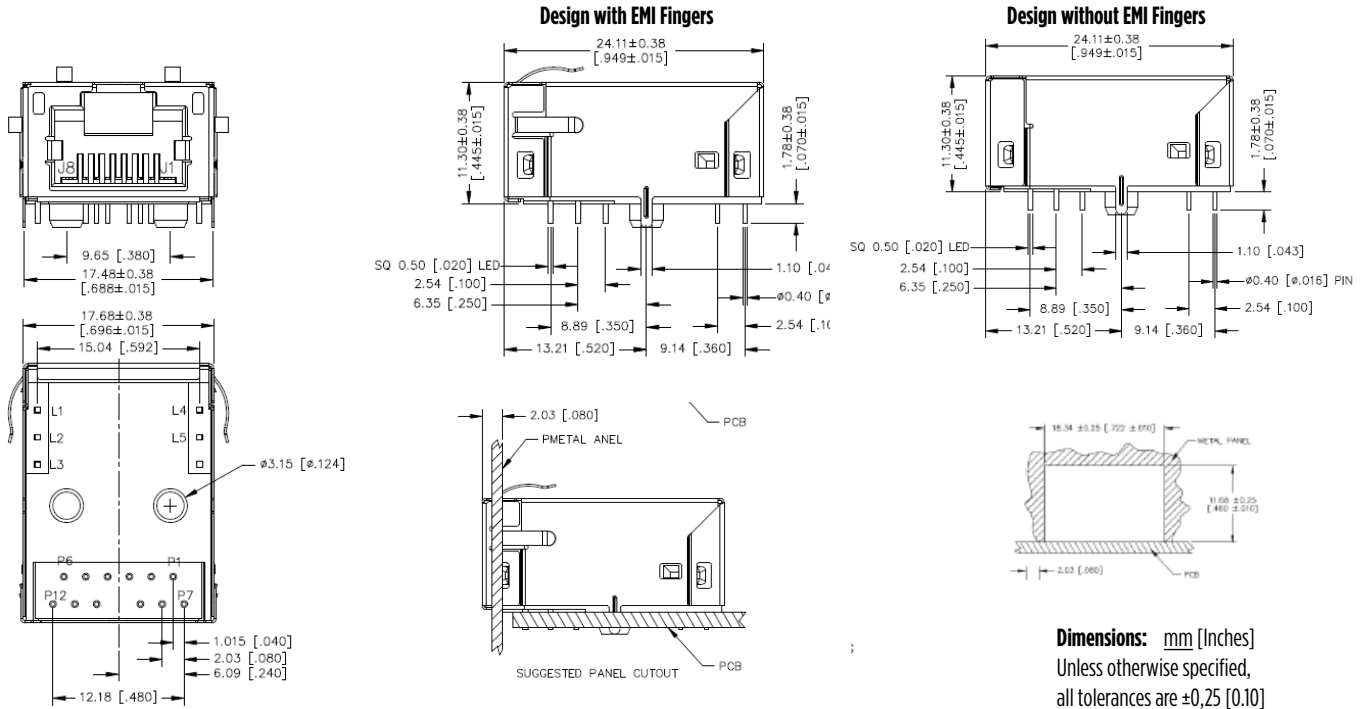
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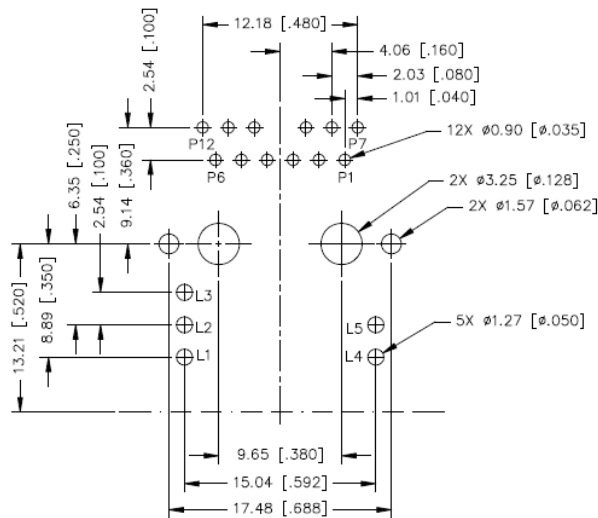


## MECHANICALS

JXD1-IVxxNL



## RECOMMENDED FOOTPRINT



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

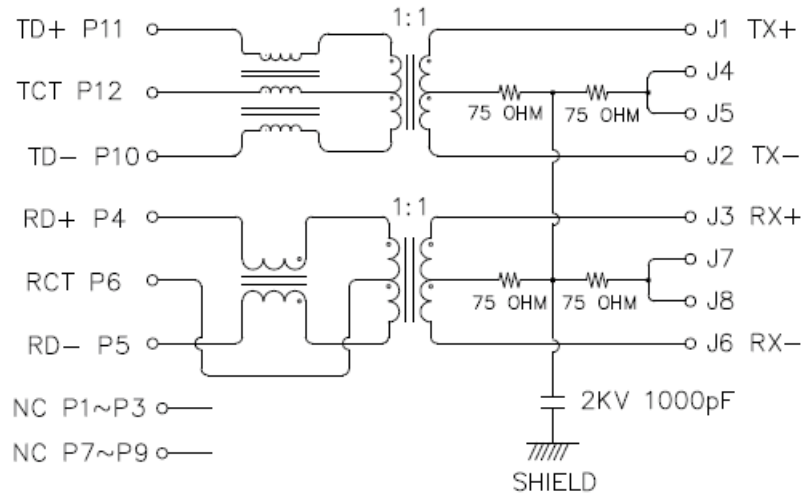
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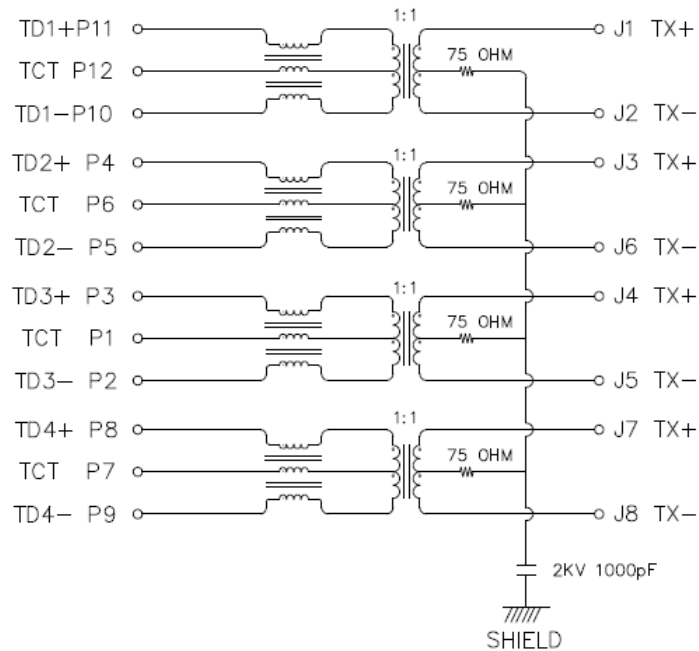


## SCHEMATICS

### JXD1-1V07NL, JXD1-1V17NL



### JXD1-1V09NL



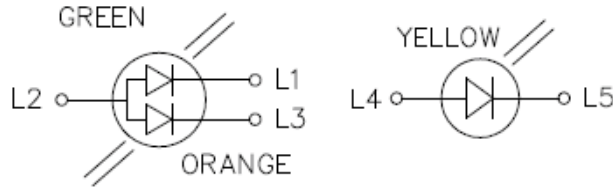
SUGGESTED FOOTPRINT (COMPONENT SIDE SHOWN)

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## LED SCHEMATICS

JXD1-1V07/09/17NL

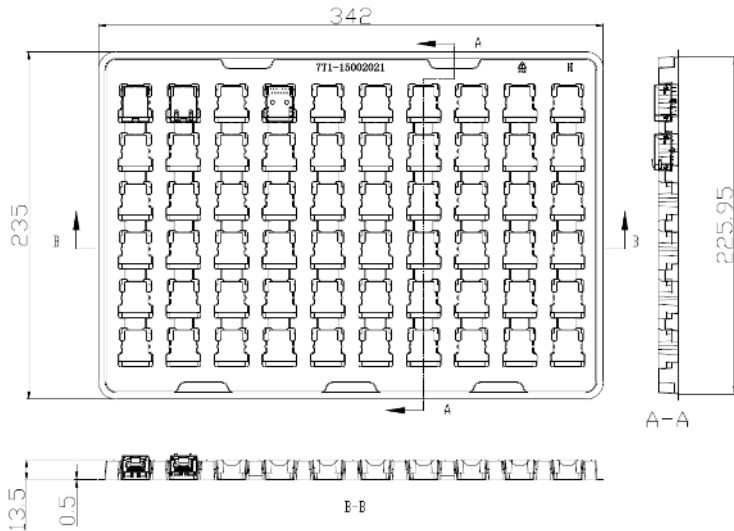


### LED SPECIFICATION

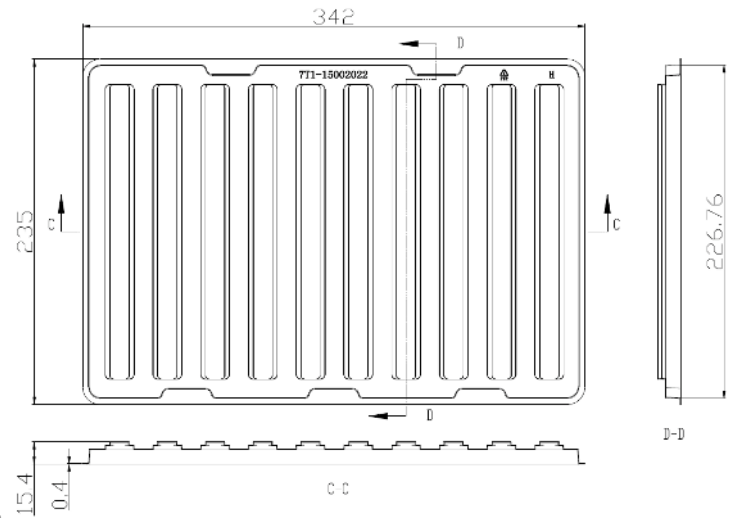
EMITTING COLOR	$\lambda_p$ (nm)	$V_f @ I_f = 20\text{mA}$	$I_r @ V_r = 5\text{V}$
GREEN	570	1.7V-2.6V	10 $\mu\text{A}$ max.
YELLOW	590	1.7V-2.6V	10 $\mu\text{A}$ max.
ORANGE	610	1.7V-2.6V	10 $\mu\text{A}$ max.

## PACKING DETAILS

### COMPONENT PACKING TRAY



### TOP PACKING COVER



1. **Material:** Conductive PET, 0.5mm thick
2. **Components per Tray:** 60 pcs
3. **Quantity per box:** 10x Tray = 600 pcs

### For More Information:

Americas - [prod\\_info\\_network\\_americas@yageo.com](mailto:prod_info_network_americas@yageo.com) | Europe - [prod\\_info\\_network\\_emea@yageo.com](mailto:prod_info_network_emea@yageo.com) | Asia - [prod\\_info\\_network\\_apac@yageo.com](mailto:prod_info_network_apac@yageo.com)

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