

**Description:**

Industrial Fast Ethernet and 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.



- Ⓢ RoHS peak wave solder temperature rating 260°C
- Ⓢ Top entry, small footprint to minimize board space
- Ⓢ Meets IEEE 802.3 specification
- Ⓢ 350µH minimum OCL with 8mA bias current
- Ⓢ High performance for maximum EMI suppression

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

Part Number	LEDs <sup>1</sup>	Speed	EMI Tabs	Insertion Loss TX/RX (dB)	Return Loss (dB MIN) 100Ω (±15Ω)					Cross Talk (dB TYP)			Common Mode Rejection (dB TYP)	Hipot (MIN)
					1-100 MHz	1-10 MHz	30 MHz	60-80 MHz	80-100 MHz	1-10 MHz	32-65 MHz	65-100 MHz		
JXD2-0Z10NL	G/Y	10/100BT	N/A	-1.2	-18	-16	-10	-	-40	-35	-30	-30	1500Vrms	
JXD2-0Z11NL	None	10/100BT	N/A	-1.2	-18	-16	-10	-	-40	-35	-30	-30	1500Vrms	
JXD2-0Z14NL	None	10/100BT	N/A	-1.2	-18	-16	-10	-	-40	-35	-30	-30	1500Vrms	
JXD2-0Z15NL	Y/G	10/100/1000BT	N/A	-1.0	-18	-18	-12	-8	-40	-35	-30	-30	1500Vrms	
JXD2-0Z25NL	Y/G	10/100/1000BT	N/A	-1.0	-18	-18	-12	-8	-40	-35	-30	-30	1500Vrms	

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)
JXD2 Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

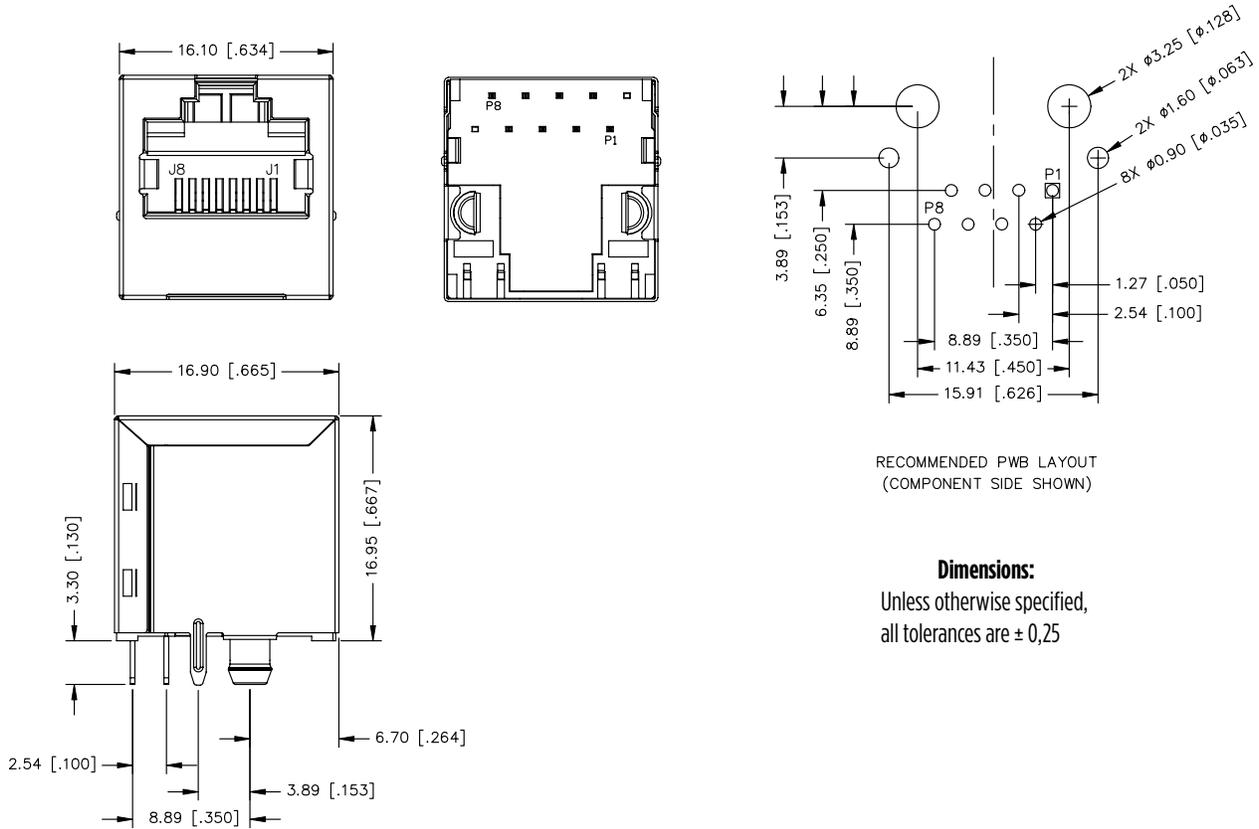
**RJ45 Material Specification**

Part Number	Shield		Contact			Housing		MSL <sup>2</sup> Rating
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification	
JXD2 Series	Brass	30-50µ inches thick nickel over brass	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

**MECHANICALS**

**JXD2-0Z11NL/-0Z14NL**

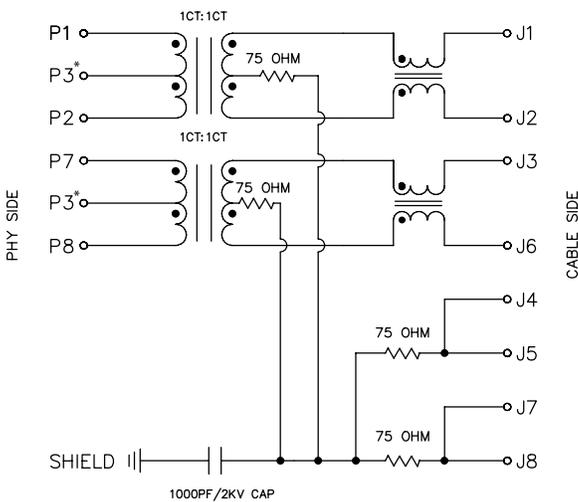


RECOMMENDED PWB LAYOUT  
(COMPONENT SIDE SHOWN)

**Dimensions:**  
Unless otherwise specified,  
all tolerances are ± 0,25

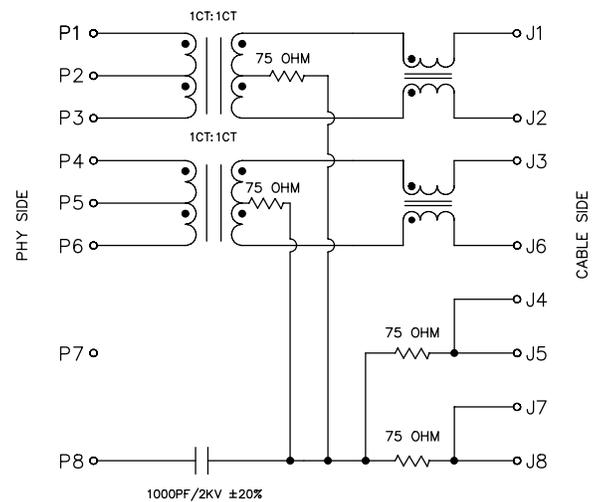
**SCHEMATICS**

**JXD2-0Z11NL**



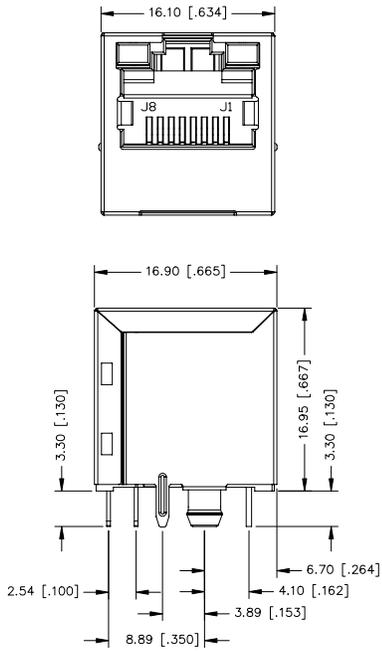
Note: \* Central tap on PHY side is shared on Pin 3

**JXD2-0Z14NL**

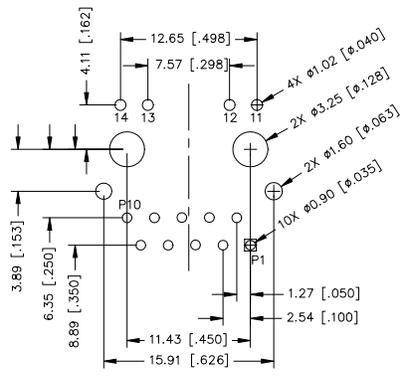
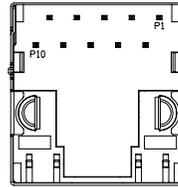


**MECHANICALS AND PCB LAYOUT**

**JXD2-0Z10/15/25NL**

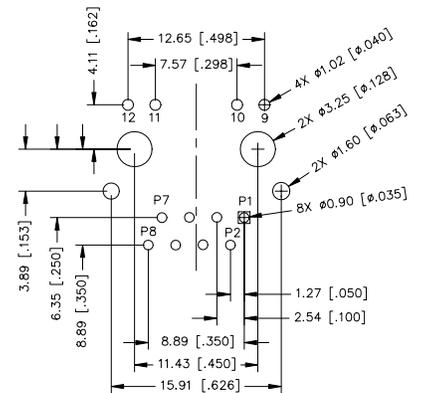
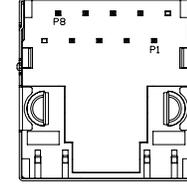


**JXD2-0Z15/25NL**



RECOMMENDED PCB LAYOUT  
(COMPONENT SIDE SHOWN)

**JXD2-0Z10NL**

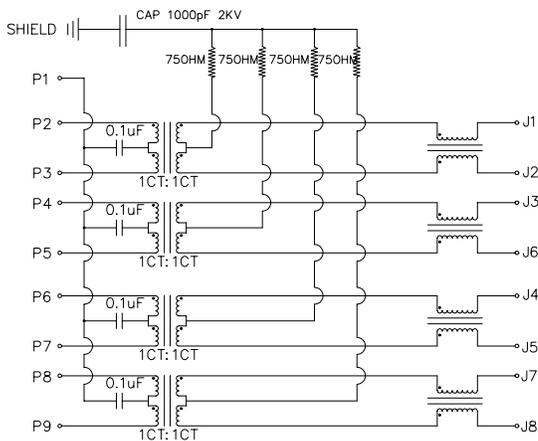


RECOMMENDED PCB LAYOUT  
(COMPONENT SIDE SHOWN)

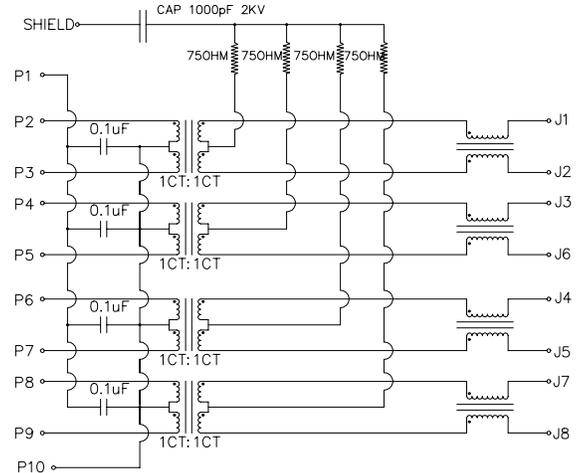
**Dimensions:**  
Unless otherwise specified,  
all tolerances are ± 0,25

**SCHEMATICS**

**JXD2-0Z15NL**

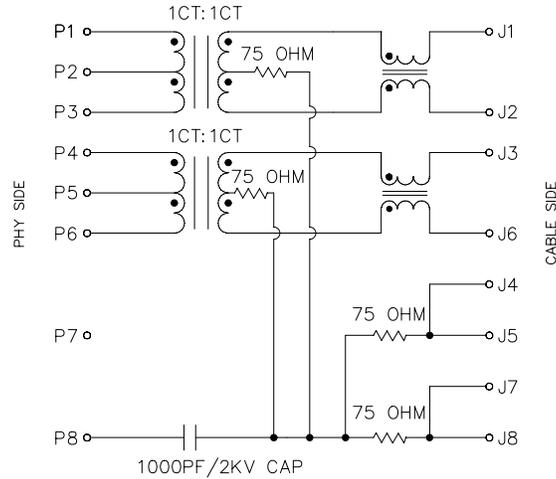


**JXD2-0Z25NL**

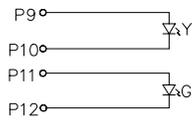


## SCHEMATICS

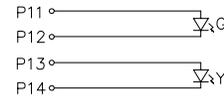
### JXD2-0Z10NL



### JXD2-0Z10NL LED's



### JXD2-0Z15NL/25NL LED's



EMITTED COLOR	GREEN	YELLOW
WAVELENGTH (nm)	565	590
POWER DISSIPATION (Pd)	105 mW MAX	105 mW MAX
DC FORWARD CURRENT	20 mA MAX	20 mA MAX
FORWARD VOLTAGE (VF) @ 20 mA	2.2V TYP	2.1V TYP

Note: Per Vendor Specification

### For More Information:

Americas - [prodinfo@networkamericas@pulseelectronics.com](mailto:prodinfo@networkamericas@pulseelectronics.com) | Europe - [comms-apps-europe@pulseelectronics.com](mailto:comms-apps-europe@pulseelectronics.com) | Asia - [prodinfo@networkapac@pulseelectronics.com](mailto:prodinfo@networkapac@pulseelectronics.com)

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