

PULSEJACK™

2xN PoE Gigstack





U.S. Patent #7241181

Description:



PoE 10/100/1000Base-T RJ45 2xN Integrated Magnetics Connector with LEDs, designed for most leading PHY manufacturers, with the addition of power feeding over signal pairs.



Features and Benefits:

-  RoHS peak wave solder temperature rating 260°C
-  Suitable for CAT 5 & 6 UTP cable or better
-  Internal magnetics are 100% electrically tested for HI-POT and functionality per IEEE802.3 requirement
-  PoE rating: 15W, 350mA, 48V

Electrical Performance Summary:

-  350µH minimum OCL with 8mA bias current
-  High performance for maximum EMI suppression

Electrical Specifications @ 25°C — Operating Temperature 0°C to +70°C

RoHS Compliant Part Number (Number of Ports)	LEDs ¹ (L/R)	Insertion TX/RX (dB TYP)	Return Loss (dB TYP) 100Ω (±15Ω)				Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)		Hipot (Vdc MIN) 1 MIN
			1-125 MHz	1-40 MHz	60 MHz	100 MHz	1-10 MHz	30-60 MHz	60-100 MHz	1-10 MHz	10-150 MHz	
J0B-0364NL (2X4)	G-Y/G-Y	-0.8	-20	-17	-14	-40	-35	-30	-50	-40	2250	
J0B-0366NL (2X6)	G-Y/G-Y	-0.8	-20	-17	-14	-40	-35	-30	-50	-40	2250	
J0B-0368NL (2X8)	G-Y/G-Y	-0.8	-20	-17	-14	-40	-35	-30	-50	-40	2250	

NOTES: 1. Bi-color LEDs: G-Y = green/yellow.

RJ45 Durability Test Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
J0B Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

RJ45 Material Specification

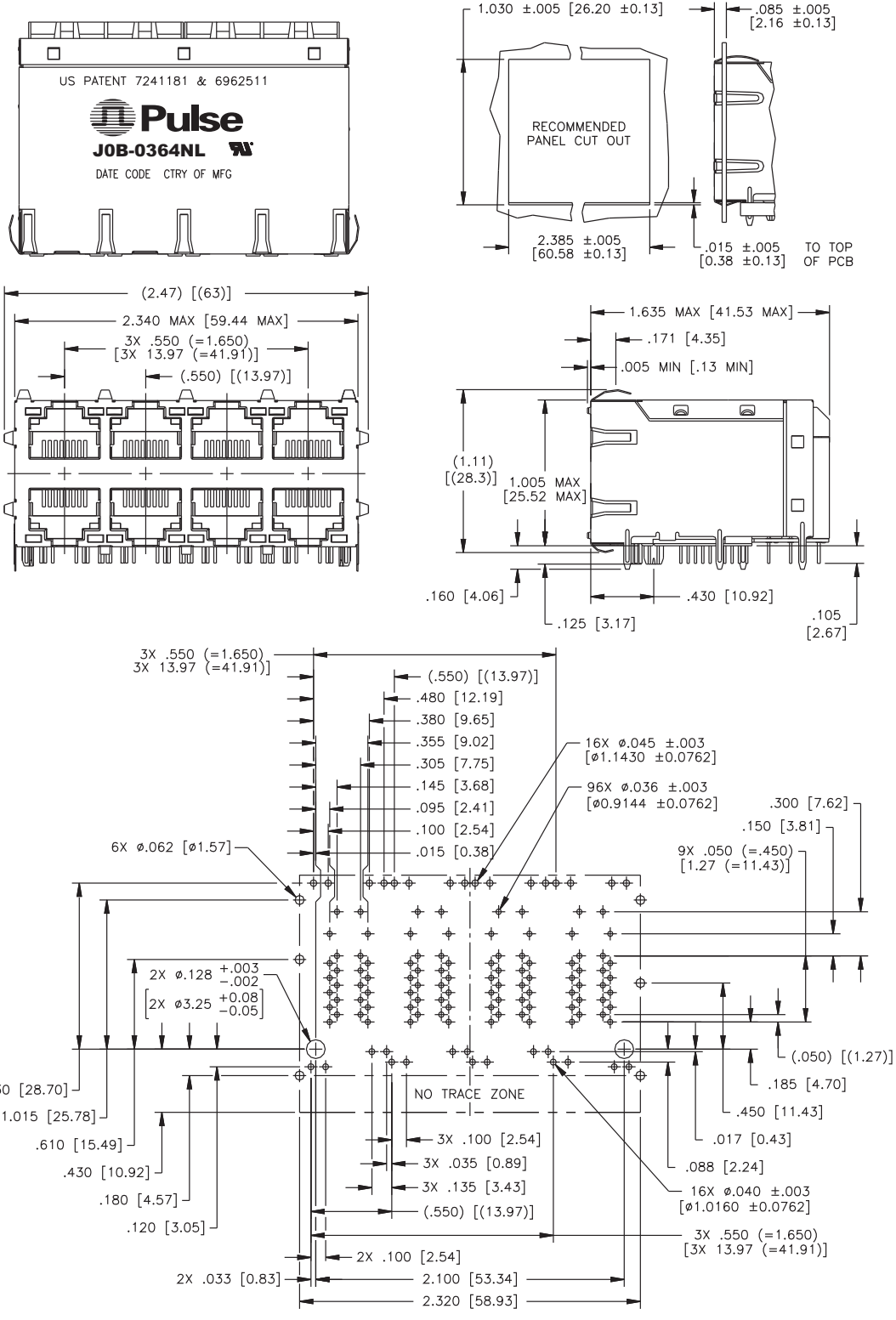
Part Number	Shield		Contact			Housing		MSL Rating
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification	
J0B Series	Brass	20-40µ inches thick nickel over brass	Phosphor Bronze	50µ inches gold over 30-50µ inches nickel	75-300µ inches tin-lead over 50-100µ inches nickel	Thermoplastic	UL 94 V-0	1

NOTES:

1. Connector dimensions comply with FCC dimension requirements.

2X4 Mechanicals

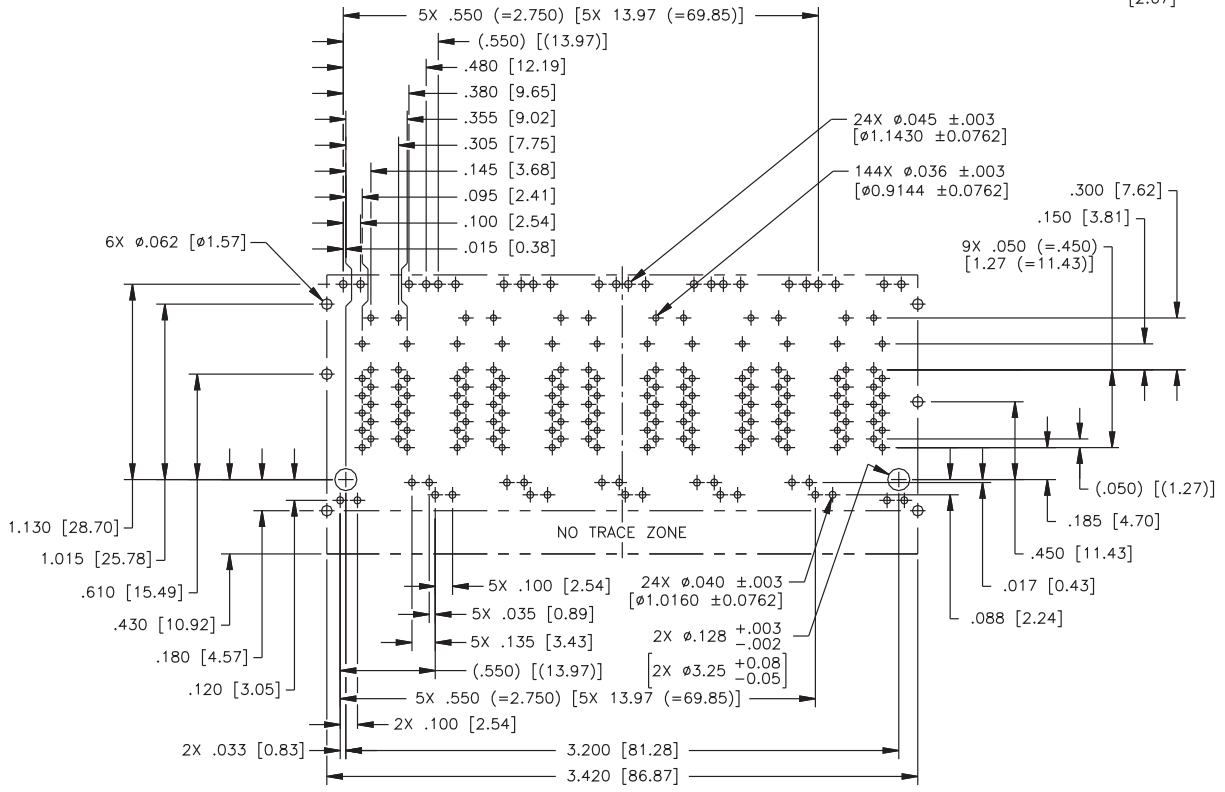
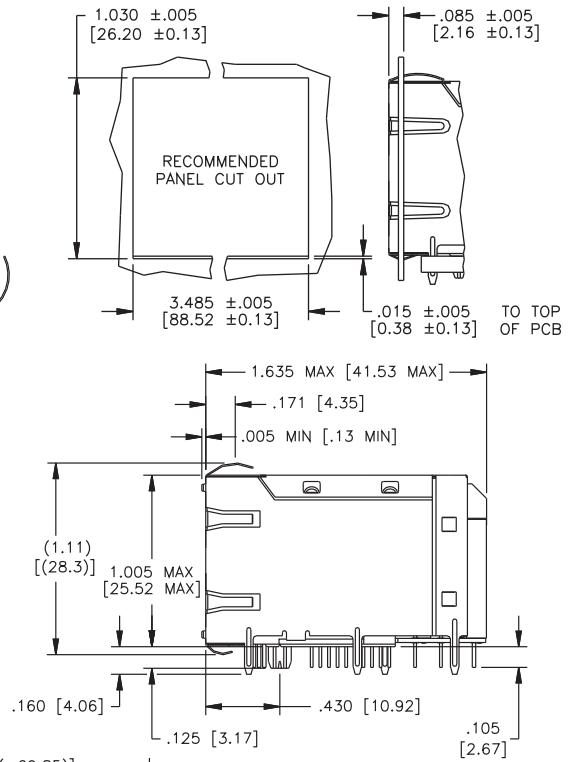
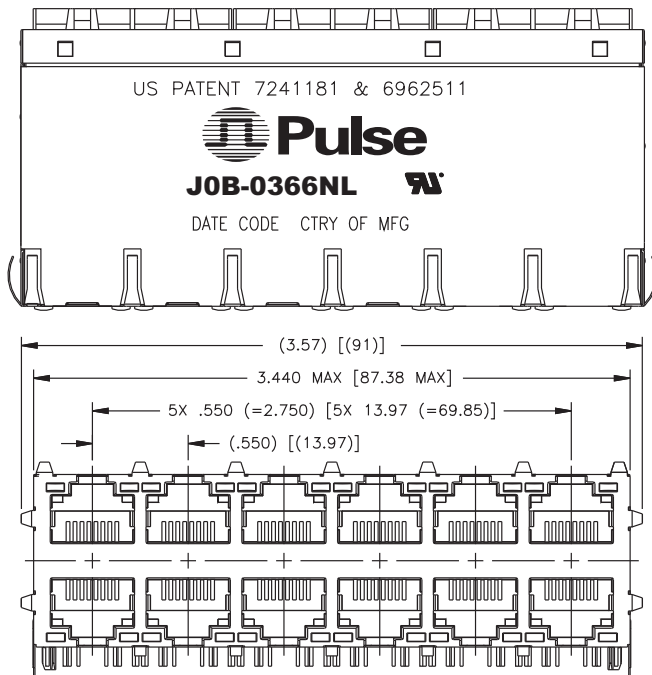
JOB-0364NL



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
 UNLESS OTHERWISE SPECIFIED DIMENSIONAL TOLERANCE IS ±.002

2X6 Mechanicals

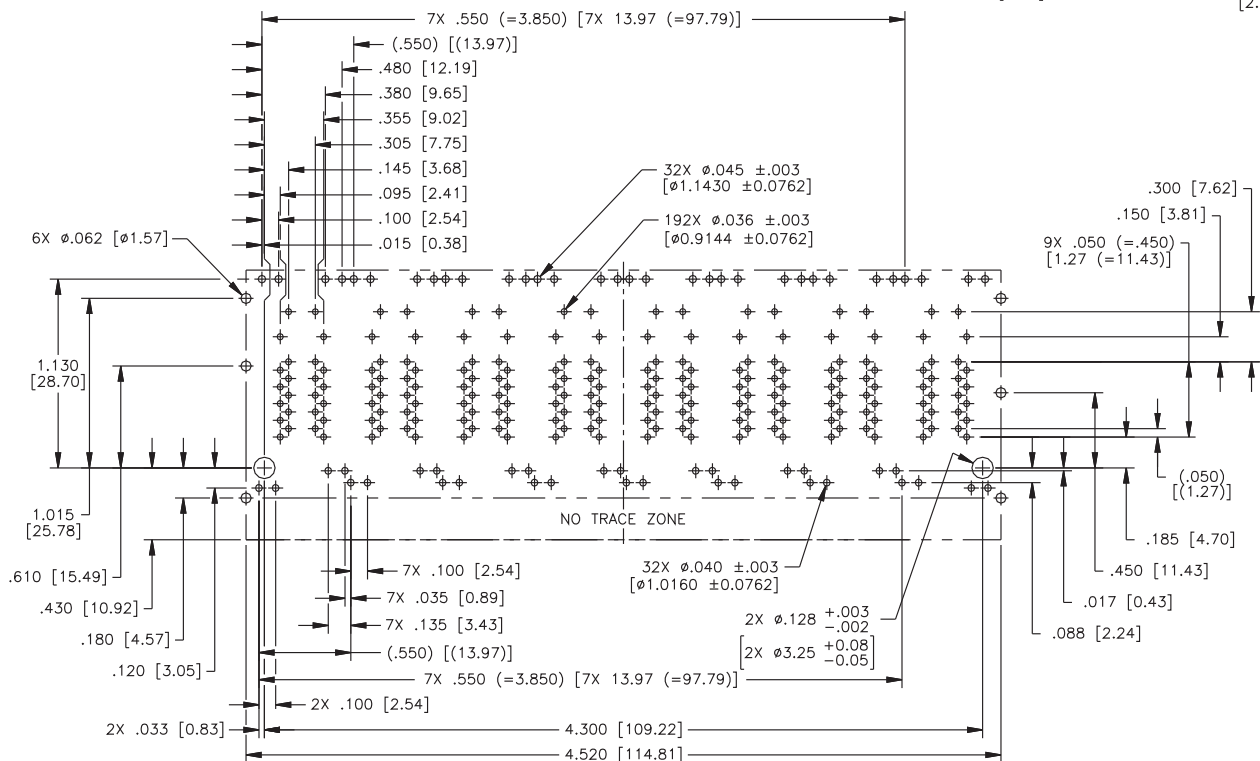
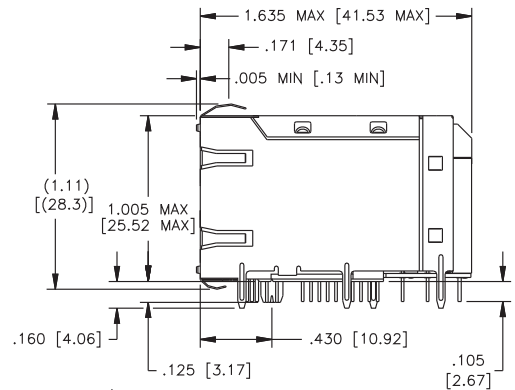
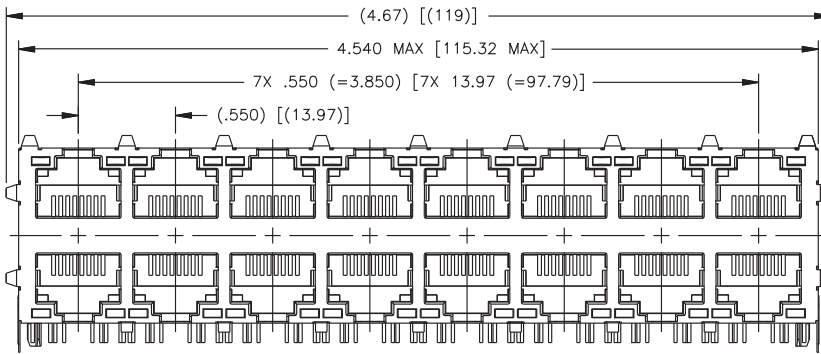
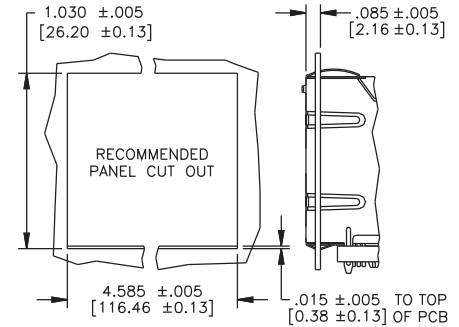
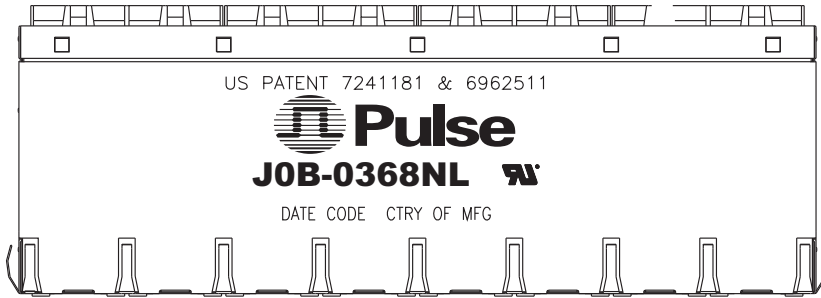
JOB-0366NL



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
 UNLESS OTHERWISE SPECIFIED DIMENSIONAL TOLERANCE IS ±.002

2X8 Mechanicals

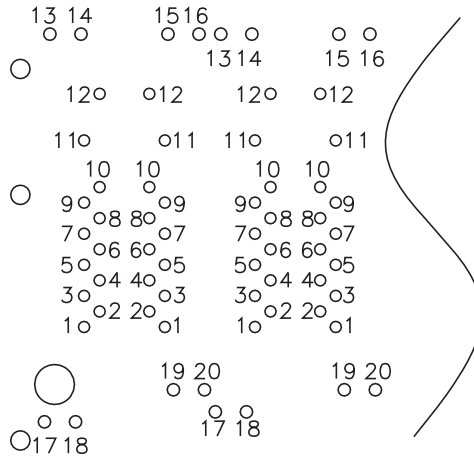
JOB-0368NL



SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
 UNLESS OTHERWISE SPECIFIED DIMENSIONAL TOLERANCE IS ±0.002

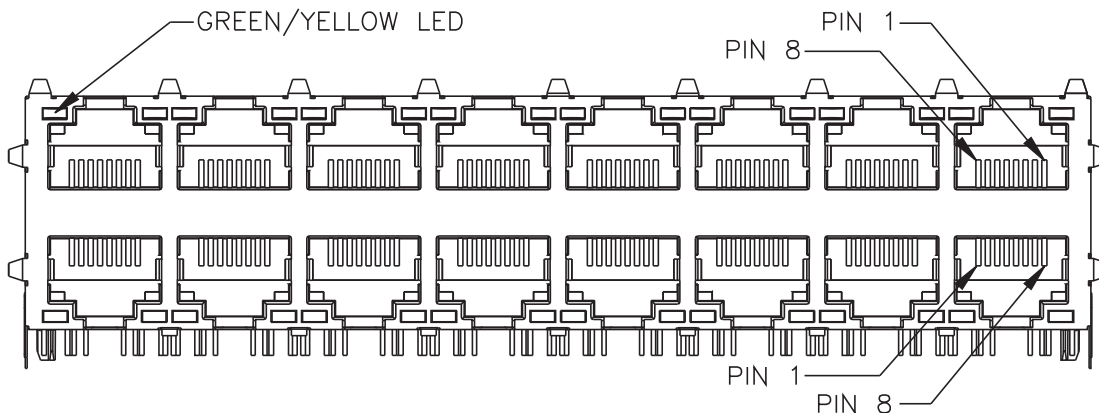
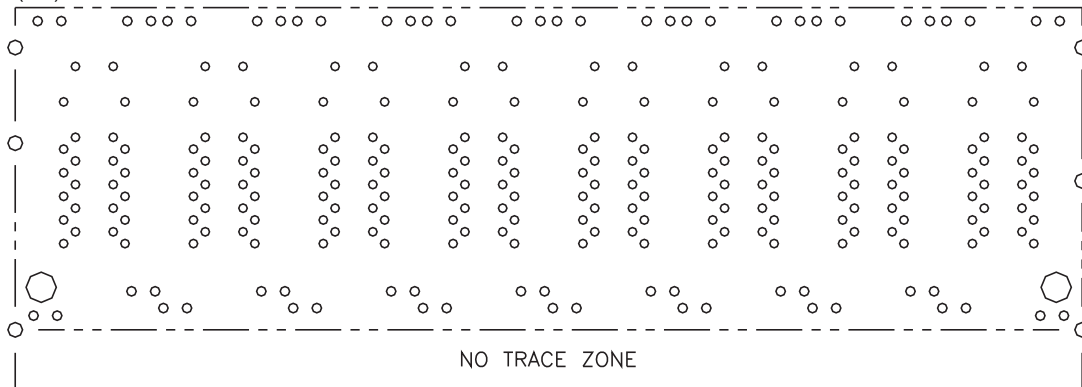
Pin-out Assignment

J0B-0364NL/66NL/68NL



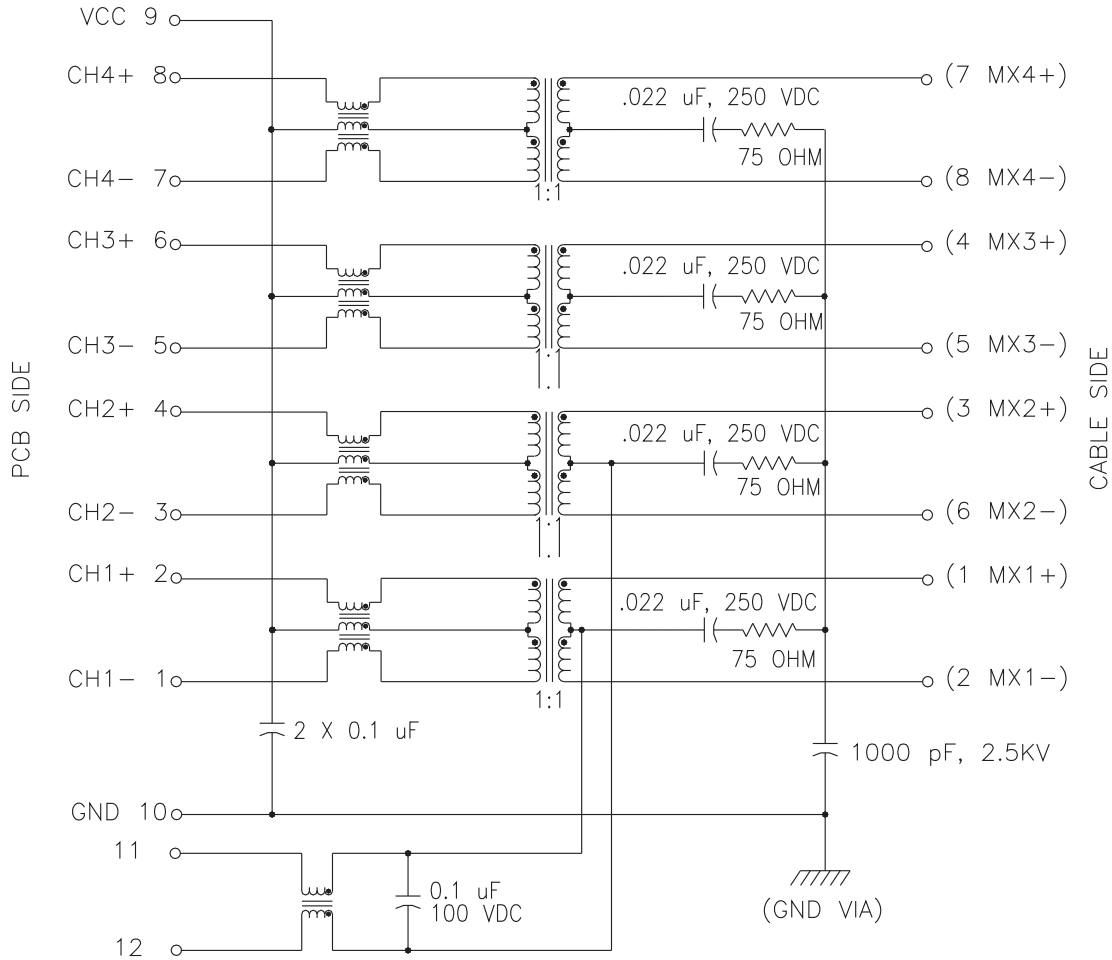
PIN ASSIGNMENT (COMPONENT SIDE VIEW)

NOTE: All parts use the same port identification system. J0B-0368NL (2x8) shown here.

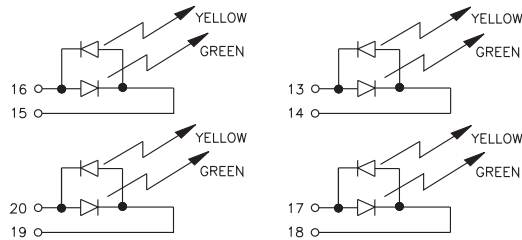


Schematic

J0B-0364NL/66NL/68NL



EMMITTED COLOR	GREEN	YELLOW
WAVELENGTH (nm)	570 nM	590 nM
BRIGHTNESS (mCD)	8.5 TYP. @ 20mA	6 TYP. @ 20 mA
VIEWING ANGLE	100°	100°
POWER DISSIPATION (Pd)	85 mW MAX	85 mW MAX
FORWARD VOLTAGE (Vf)	2.2 TO 2.8 V	2.15 TO 2.8 V
REVERSE VOLTAGE (Vr)	5.0 V MAX	5.0 V MAX



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