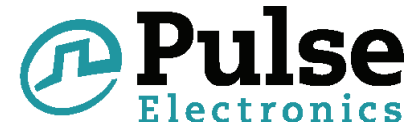
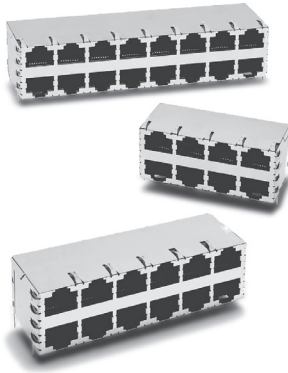


PulseJack® 2xN RJ45 Connector



Description:

100 Base-TX (Fast Ethernet) RJ45 2xN Integrated Connector Module (ICM) with or without LEDs - Designed to support Switch and Gateway applications.



Features and Benefits:

- Ⓜ RoHS peak wave solder temperature rating 260°C
- Ⓜ Suitable for CAT 5 & 6 Fast Ethernet Cable or better UTP
- Ⓜ Internal magnetics are 100% electrically tested for HI-POT and functionality
- Ⓜ Internal magnetics options available
- Ⓜ 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)	No. of Ports	LEDs L/R	Insertion Loss (dB TYP)	Return Loss (dB TYP) 100Ω (±15Ω)					Crosstalk (dB TYP)			Common Mode Rejection (dB TYP)	
				1-65 MHz	1-10 MHz	10-30 MHz	30-60 MHz	60-80 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-50 MHz	50-150 MHz
J20-0013NL	4	G/Y, G/Y	-1	-20	-16	-12	-12	-40	-35	-30	-30	-20	
J20-0114NL	8	G/Y, G/Y	-1	-20	-16	-12	-12	-40	-35	-30	-30	-20	
J20-0115NL	12	G/Y, G/Y	-1	-20	-16	-12	-12	-40	-35	-30	-30	-20	
J20-0116NL	16	G/Y, G/Y	-1	-20	-16	-12	-12	-40	-35	-30	-30	-20	
JX20-0114NL*	8	G/Y, G/Y	-1	-20	-16	-12	-12	-40	-35	-30	-30	-20	
JX20-0115NL*	12	G/Y, G/Y	-1	-20	-16	-12	-12	-40	-35	-30	-30	-20	
JX20-0116NL*	16	G/Y, G/Y	-1	-20	-16	-12	-12	-40	-35	-30	-30	-20	

Notes:

1. (*) Operating Temperature: -40°C to +85°C
2. Bi-color LEDs: G = green; Y = yellow for each port

RJ45 Durability Test Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability
J2 and JX2 Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions

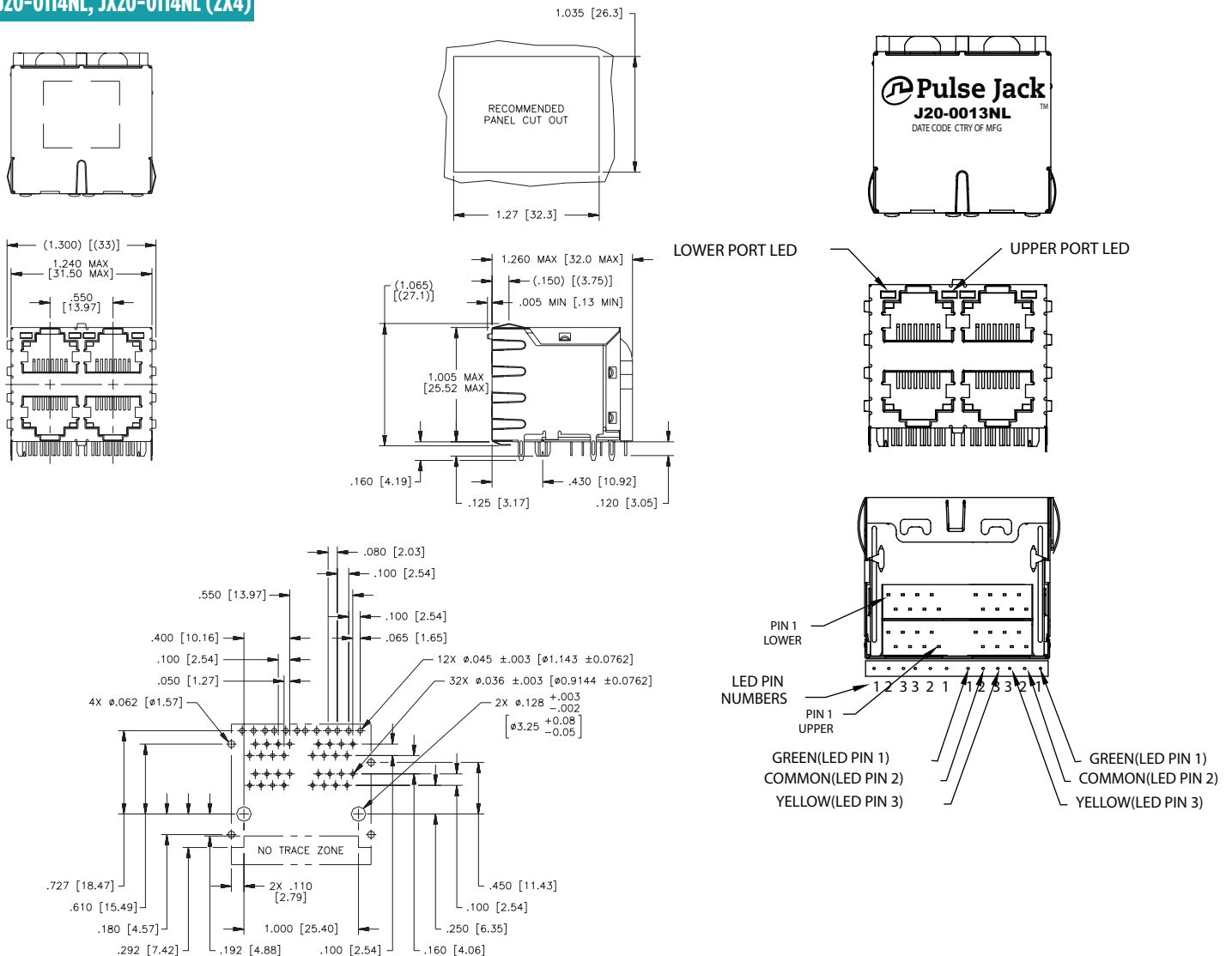
RJ45 Material Specification							
Part Number	Shield		Contact			Housing	
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification
J2 and JX2 Series	Brass	10-20μ inches Nickel over 10-20μ inches Brass	Phosphor Bronze	Nickel underplating and selective gold plating 30μ inches	Tin matte finish	Thermoplastic	UL 94 V-0

Notes:

1. All connector part numbers starting with the series prefix J2 and JX2 comply to the above limits. 2. Connector dimensions comply with FCC dimension requirement.

J2 Series Mechanicals

J20-0114NL, JX20-0114NL (2X4)

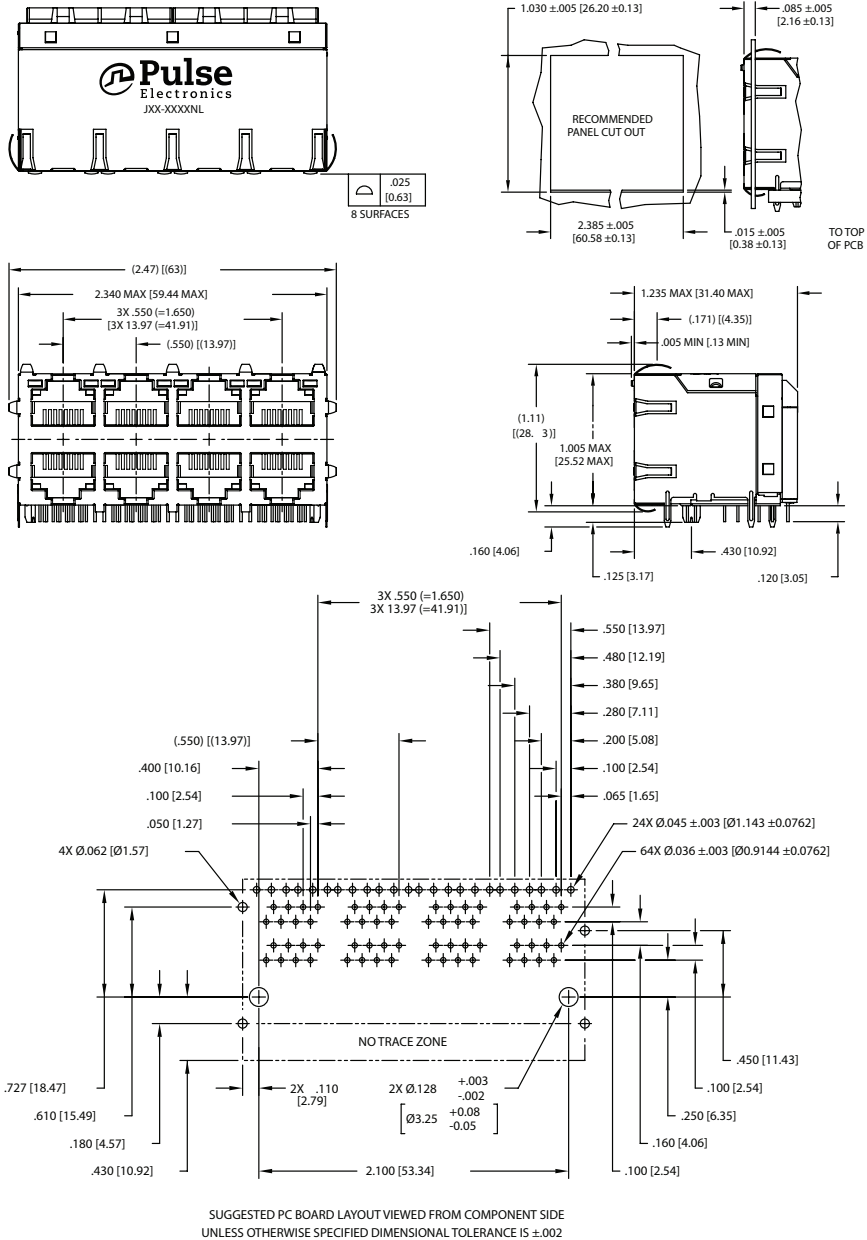


SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
UNLESS OTHERWISE SPECIFIED DIMENSIONAL TOLERANCE IS ±.002

Dimensions: Inches
mm
Unless otherwise specified,
all tolerances are ± .010,
0,25

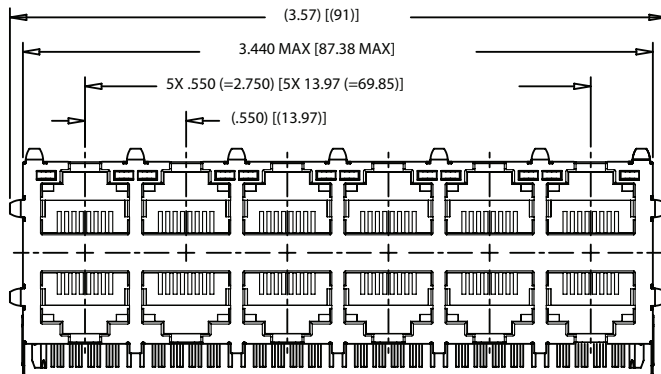
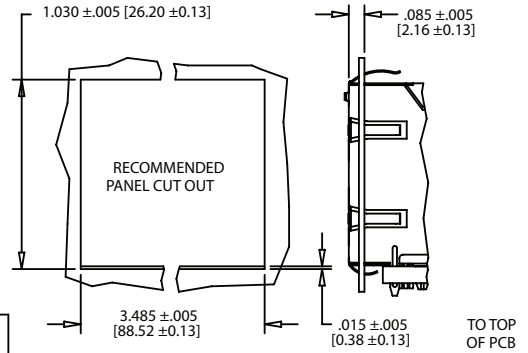
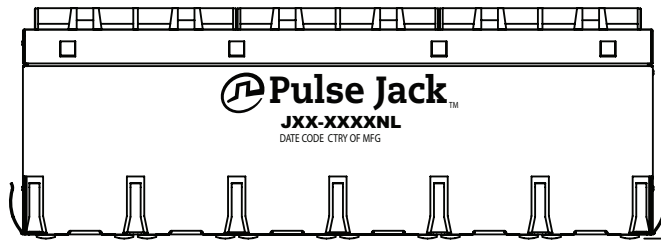
J2 Series Mechanicals

J20-0114NL, JX20-0114NL (2X4)

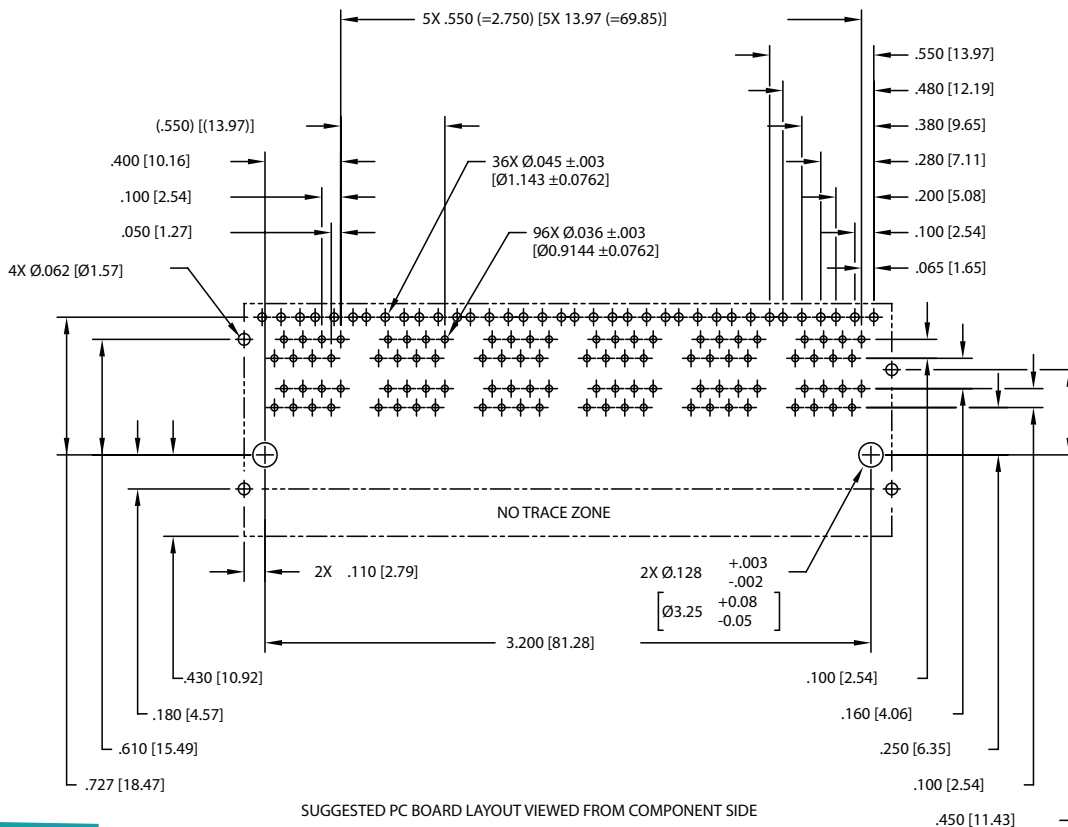
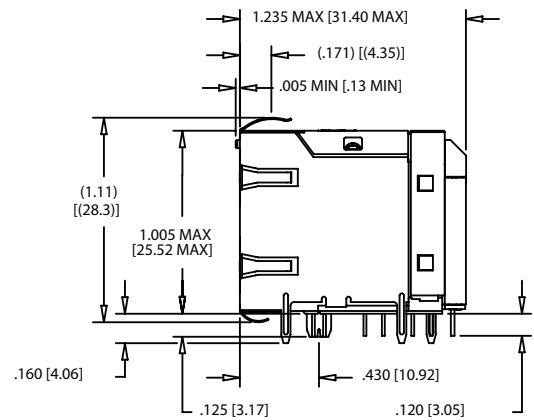


J2 Series Mechanicals

J20-0115NL, JX20-0115NL (2X6)

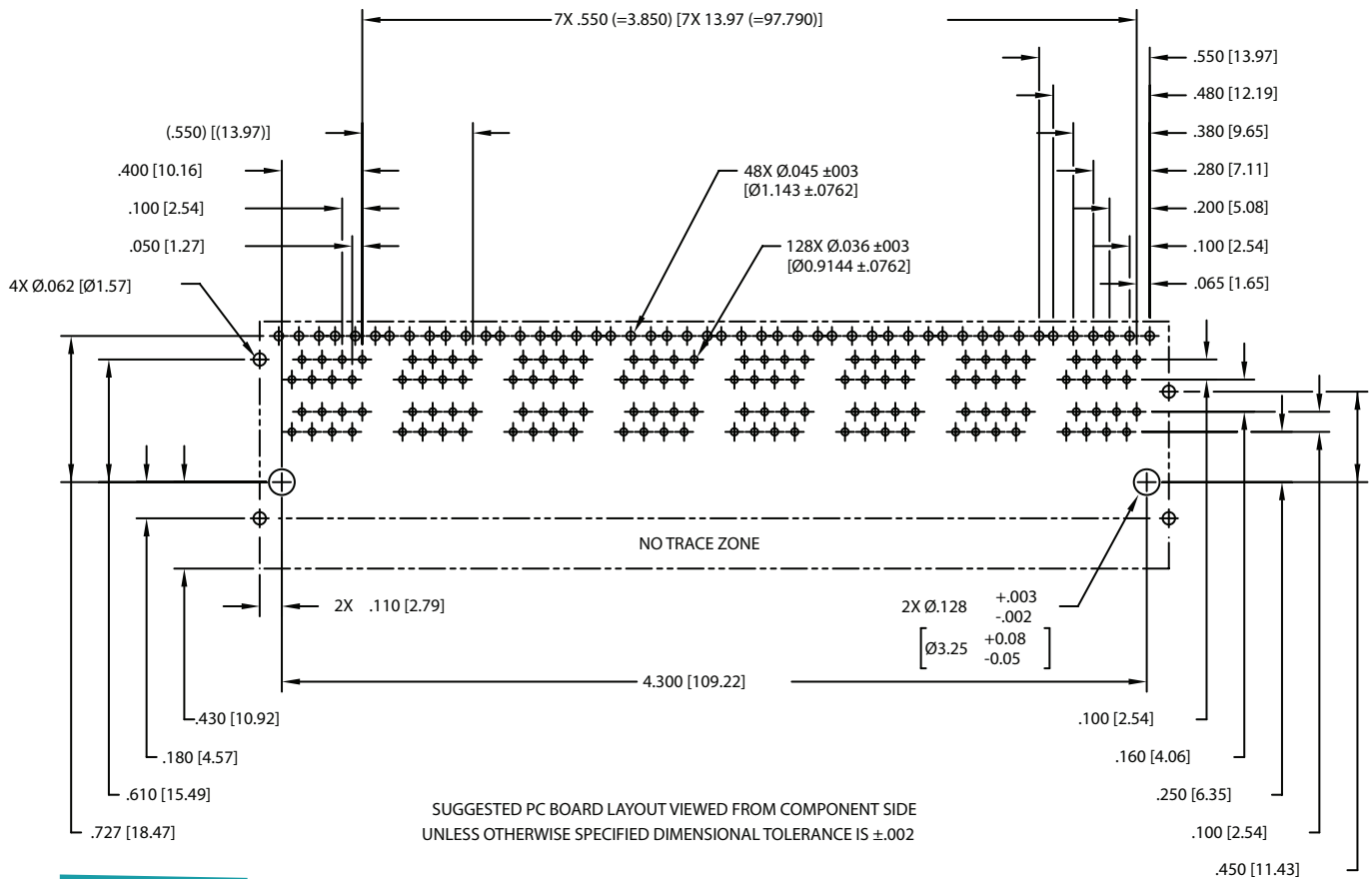
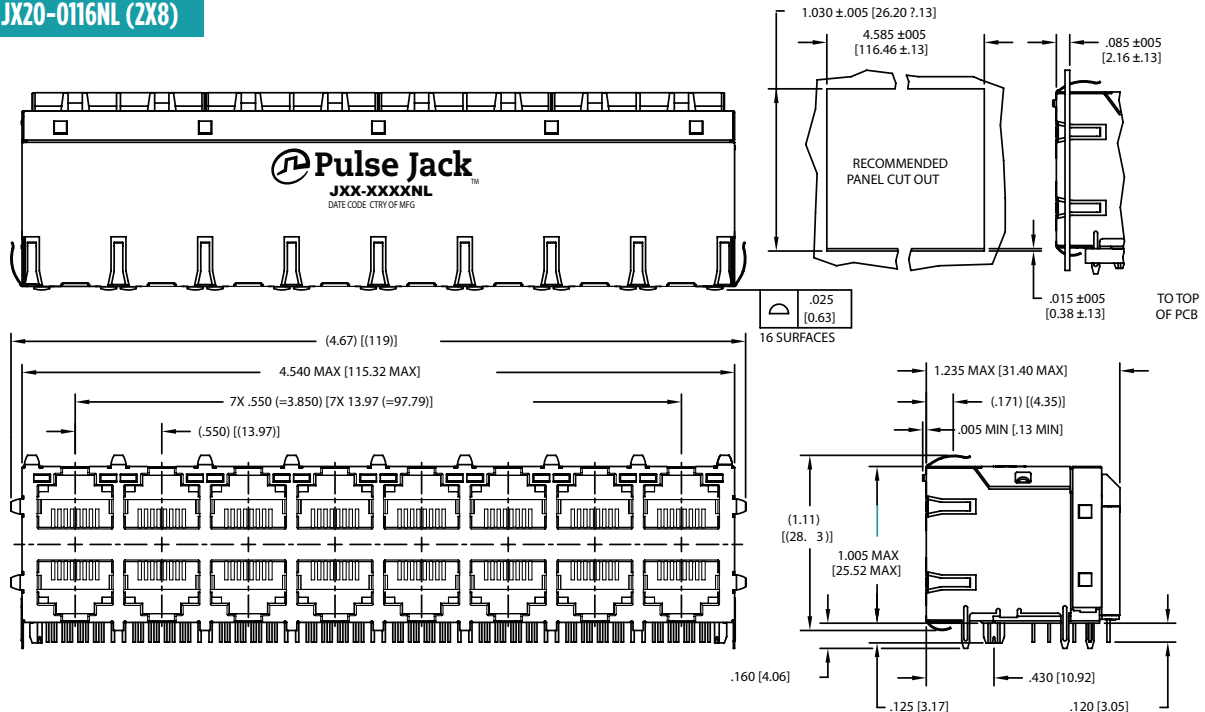


12 SURFACES
.025 [0.63]



J2 Series Mechanicals

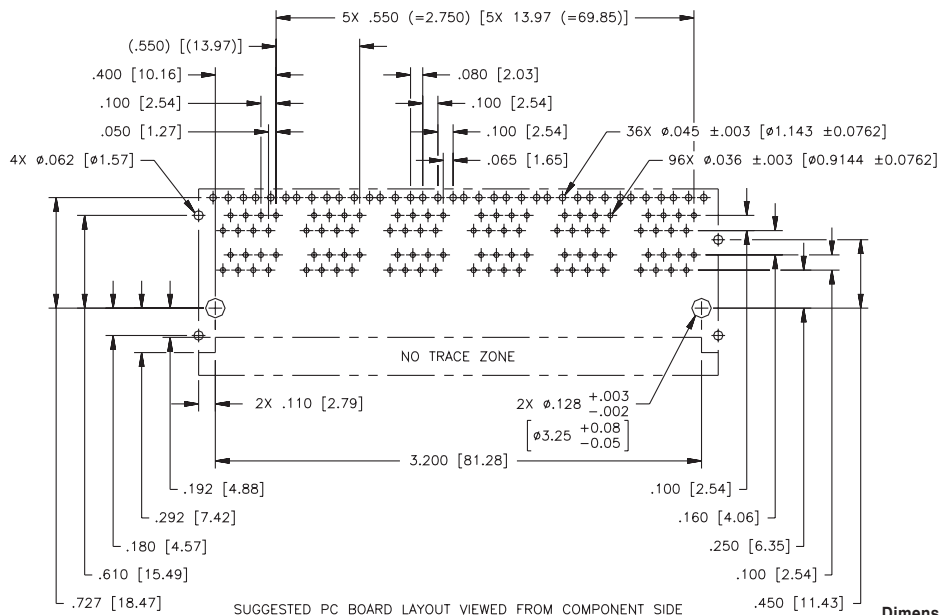
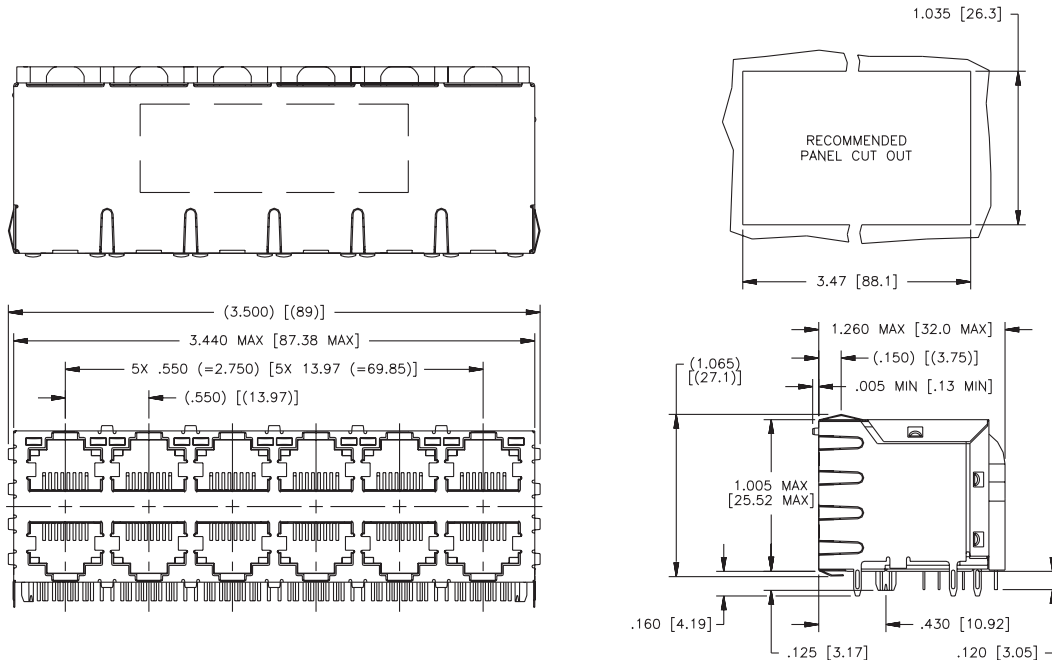
J20-0116NL, JX20-0116NL (2X8)



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

J2 Series (With LEDs) Mechanicals (not PoE Enabled)

2X6

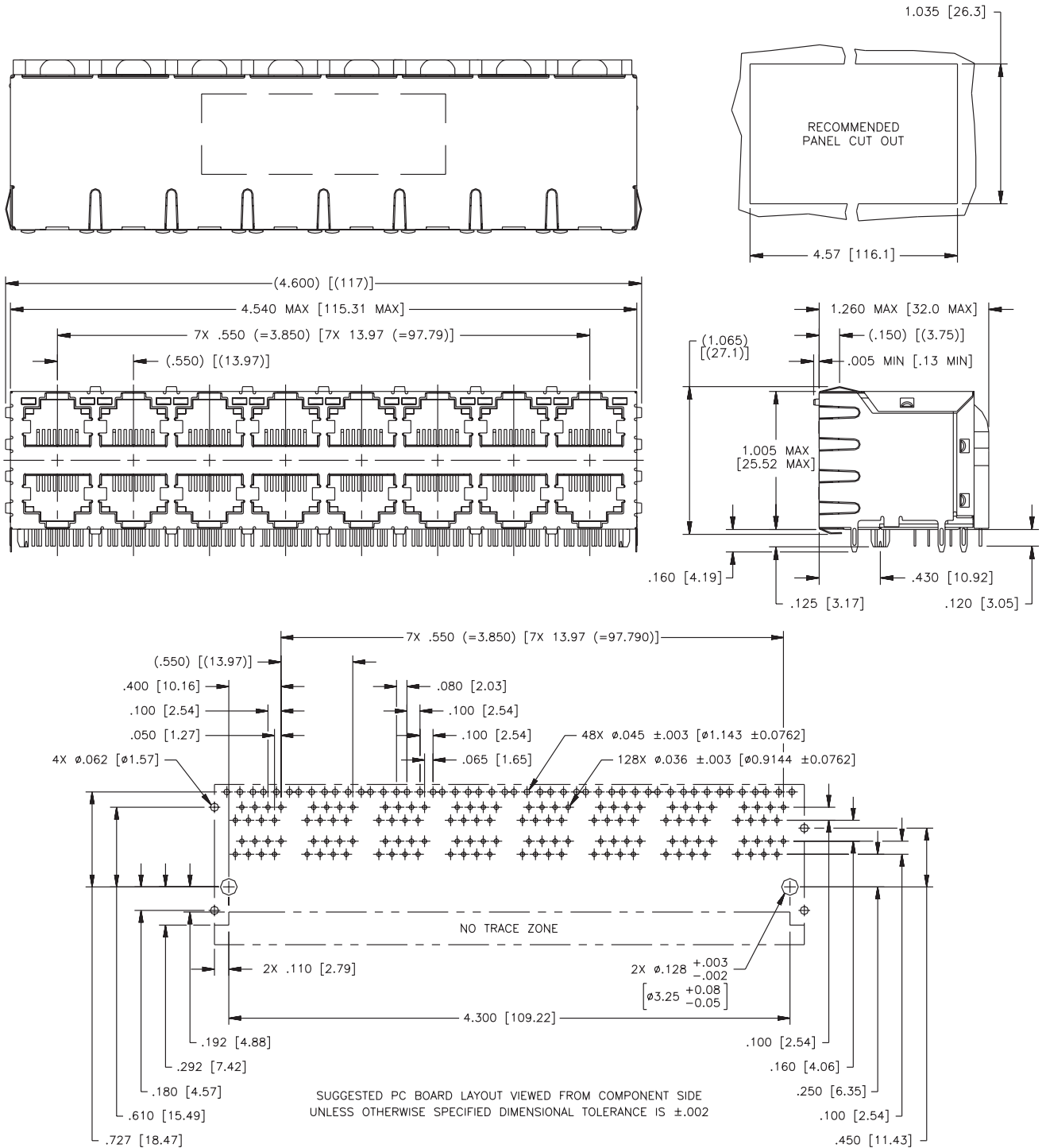


SUGGESTED PC BOARD LAYOUT VIEWED FROM COMPONENT SIDE
UNLESS OTHERWISE SPECIFIED DIMENSIONAL TOLERANCE IS \pm .002

Dimensions: Inches
mm
Unless otherwise specified,
all tolerances are \pm .010
0,25

J2 Series (With LEDs) Mechanicals (not PoE Enabled)

2X8

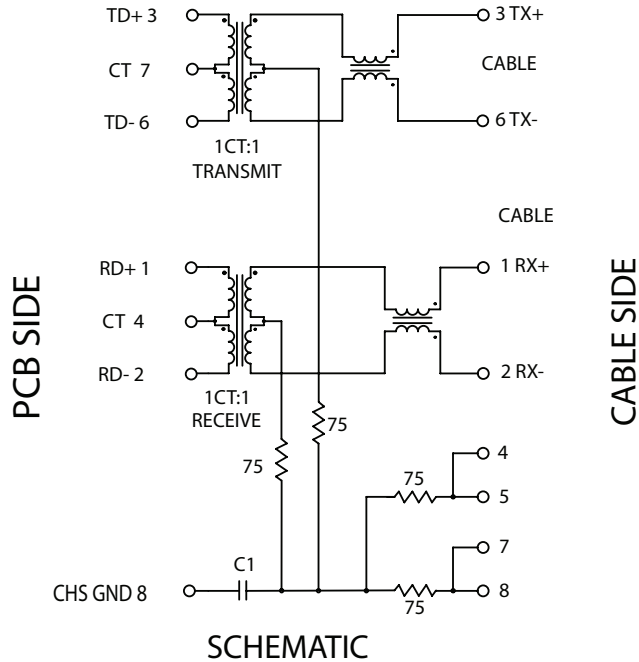


Dimensions: $\frac{\text{Inches}}{\text{mm}}$
Unless otherwise specified, all tolerances are $\pm \frac{.010}{0,25}$

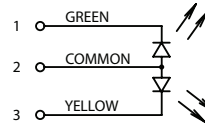
PulseJack® 2xN RJ45 Connector

J2 Series Electrical Schematics

J20-XXXXNL and JX20-XXXXNL



LED Configuration



LED ELECTRICAL SPECIFICATIONS		
EMMITTED COLOR	GREEN	YELLOW
WAVE LENGTH (If = 20 mA)	570 nm	590 nm
BRIGHTNESS - MIN TO MAX (mcd) If - (mA)	5 TO 12 20	3.5 TO 8.5 20
VIEWING ANGLE	120°	120°
POWER DISSIPATION (Pd)	85 mW MAXIMUM	85 mW MAXIMUM
FORWARD CURRENT (0.1 ms PULSE)	160 mA MAXIMUM	160 mA MAXIMUM
FORWARD VOLTAGE (Vf) (If = 20 mA)	2.8 V MAXIMUM	2.8 V MAXIMUM

NOTE: PER VENDOR'S SPECIFICATION

For More Information

Pulse Worldwide Headquarters
12220 World Trade Drive
San Diego, CA
92128
U.S.A.

Tel: 858 674 8100

Pulse Europe
Einsteinstrasse 1
D-71083 Herrenberg
Germany

Tel: 49 7032 7806

Pulse China Headquarters
B402, Shenzhen Academy of
Aerospace Technology Bldg.
10th Kejian Road
High-Tech Zone
Nanshan District
Shenzhen, PR China
518057

Pulse North China
Room 2704/2705
Super Ocean Finance
Ctr.
2067 Yan An Road
West
Shanghai 200336
China

Pulse South Asia
135 Joo Seng Road
#03-02
PM Industrial Bldg.
Singapore 368363

Tel: 65 6287 8998
Fax: 65 6287 8998

Pulse North Asia
3F, No. 198
Zhongyuan Road
Zhongli City
Taoyuan County 320
Taiwan R. O. C.
Tel: 886 3 4356768
Fax: 886 3 4356823
(Pulse)

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2014. Pulse Electronics, Inc. All rights reserved.