

# PulseJack™

## 1X1 Tab-Up RJ45

100 Base-TX RJ45 1X1 Tab-Up 8 pin Integrated Magnetics Connector, designed for industrial rated applications and is suitable for reflow solder mounting.



### Features and Benefits:

- High Temperature rated parts designed for use in Pin-in-Paste processing with 260°C max reflow temperature
- Meets IEEE802.3 specification
- 350µH minimum OCL with 8mA DC bias current
- Extended Temperature range from -40°C to 85°C

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

Part Number <sup>1</sup>	EMI Fingers	LED (L/R)	Insertion Loss 1 - 65MHz (dB TYP)	Return Loss (dB TYP)			CCMR (dB TYP)		Crosstalk (db TYP)			Hipot (Vrms)
				1 - 10 MHz	30 MHz	60 - 80 MHz	1 - 50 MHz	50 - 130 MHz	1 - 10 MHz	30 - 60 MHz	60 - 100 MHz	
JXR1-0001NL	YES	-	-1.0	-20	-16	-10	-30	-20	-40	-35	-30	1500
JXR1-0005NL	NO	-	-1.0	-20	-16	-10	-30	-20	-40	-35	-30	1500
JXR1-0011NL	YES	G/Y	-1.0	-20	-16	-10	-30	-20	-40	-35	-30	1500
JXR1-0015NL	NO	G/Y	-1.0	-20	-16	-10	-30	-20	-40	-35	-30	1500

#### Notes:

1. When ordering JXR0-0011NL supplied in **Tape and Reel**, please add a "T" on the end of the part code - e.g. JXR1-0011NL becomes JXR1-0011NL.T
2. Maximum Reflow Solder Temperature: 2x SRP 260°C for 5 seconds with LEDs and 2x SRP 260°C for 10 seconds without LEDs

### RJ45 Durability Testing Rating

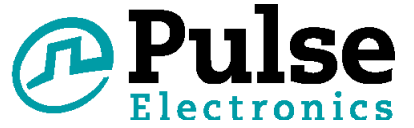
Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JXR1 - Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

### RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL <sup>2</sup>
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification	Rating
JXR1 - Series	Brass	10-20m inches Nickel over 10-20m inches Brass	Phosphor Bronze	Nickel underplating and selective gold plating 30µ inches	Matte Tin finish over Nickel	Thermoplastic	UL 94 V-0	3

Notes: **1.** Connector dimensions comply with FCC dimension requirements. **2.** MSL = Moisture Sensitivity Level rating from 1 to 5 (highest rating = 1, lowest rating = 5).

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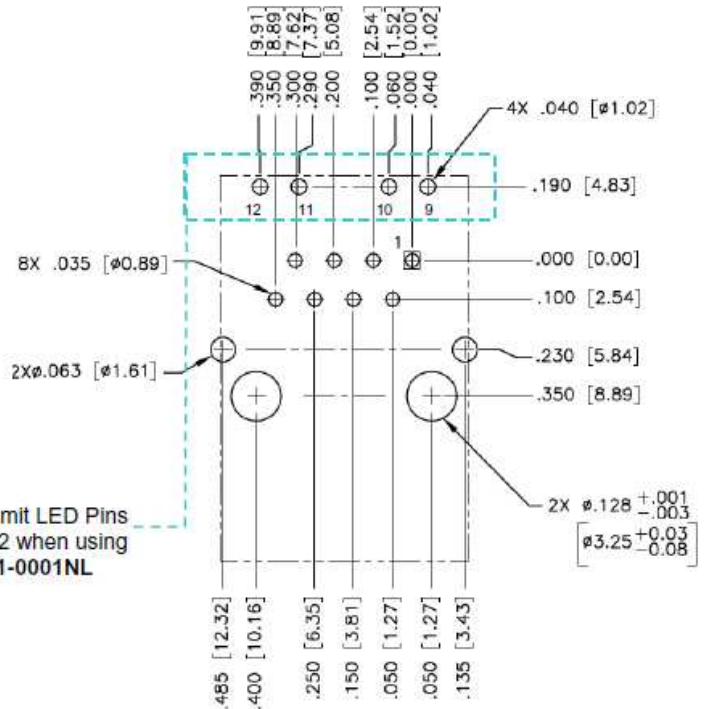
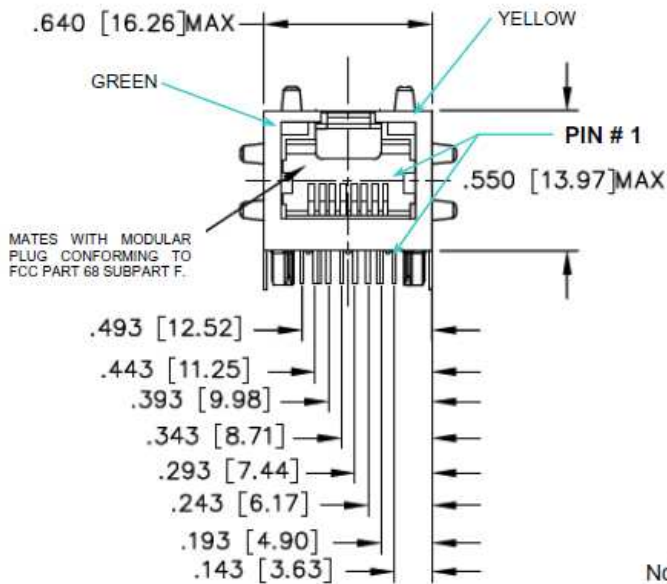
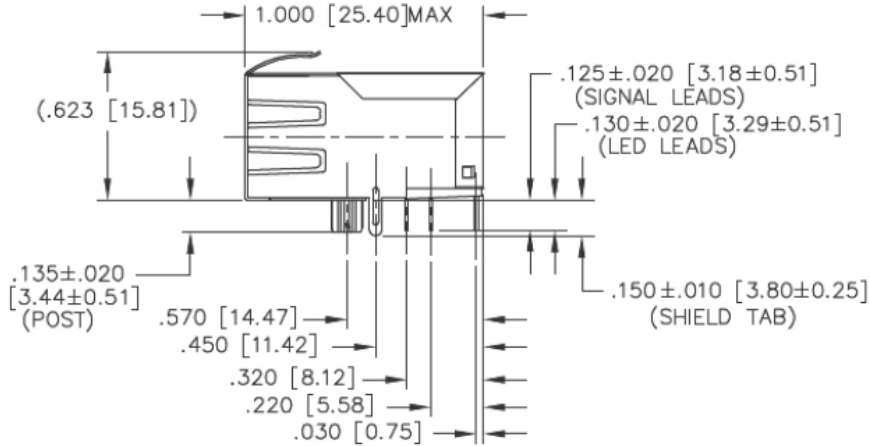
100 Base-TX RJ45 1X1 Tab-Up 8 pin Integrated Magnetics Connector, designed for industrial rated applications and is suitable for reflow solder mounting.

## Mechanicals

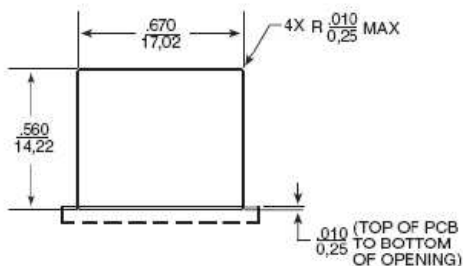
JXR1-0001/JXR1-0011NL

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$



Note: Omit LED Pins #9 to #12 when using JXR1-0001NL



FACE VIEW

RECOMMENDED PANEL CUTOUT

RECOMMENDED PCB LAYOUT VIEWED FROM  
COMPONENT SIDE

PCB LAYOUT DIMENSIONS REFERENCED TO PIN#1 AND  
 $\pm .003$  UNLESS OTHERWISE SPECIFIED

J437.B (04/12)

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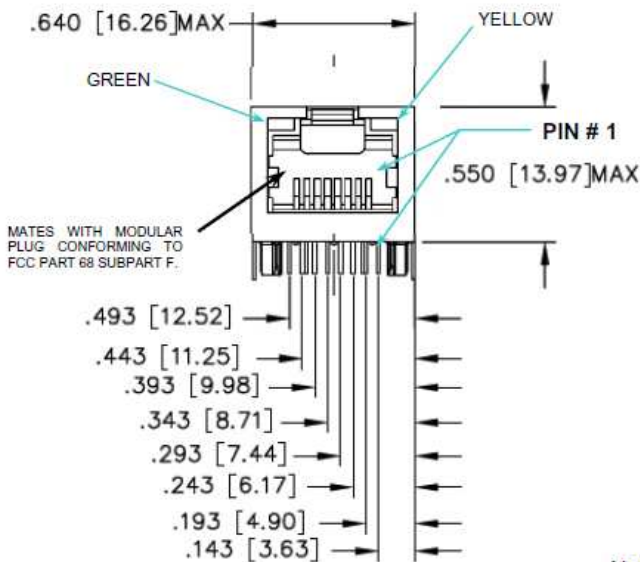
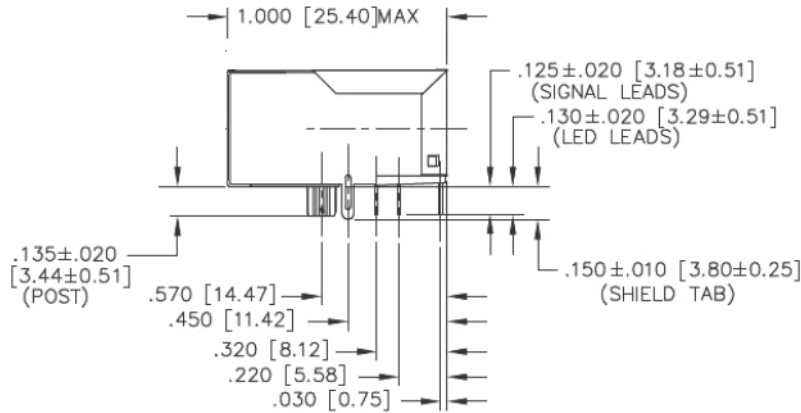


## Mechanicals (continued)

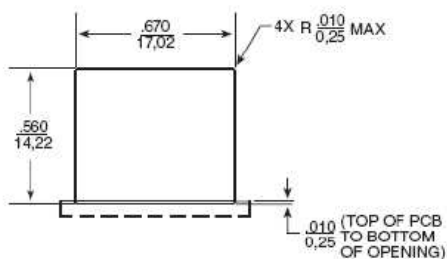
JXR1-0005/JXR1-0015NL

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0,25}$

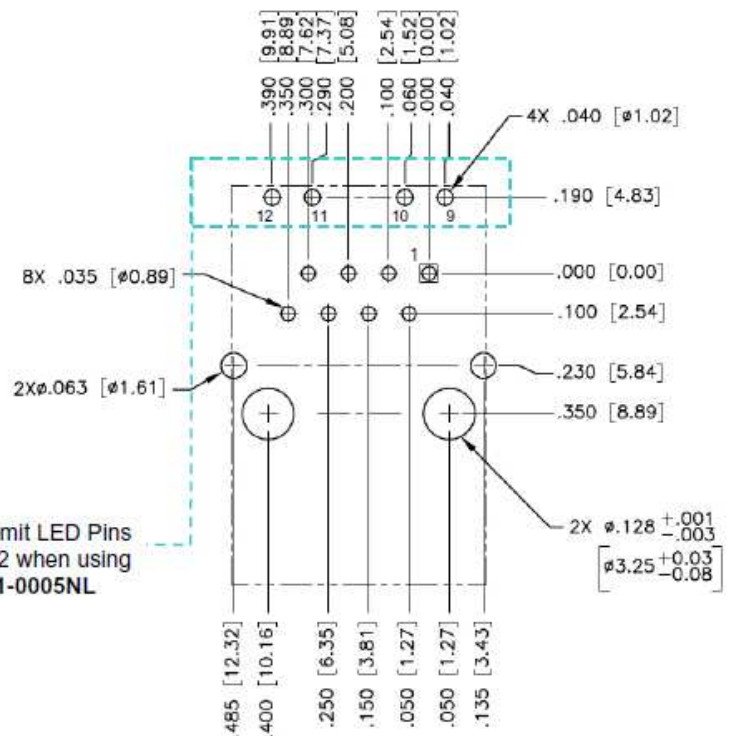


MATES WITH MODULAR PLUG CONFORMING TO FCC PART 68 SUBPART F.



FACE VIEW

RECOMMENDED PANEL CUTOUT



Note: Omit LED Pins #9 to #12 when using JXR1-0005NL

RECOMMENDED PCB LAYOUT VIEWED FROM COMPONENT SIDE

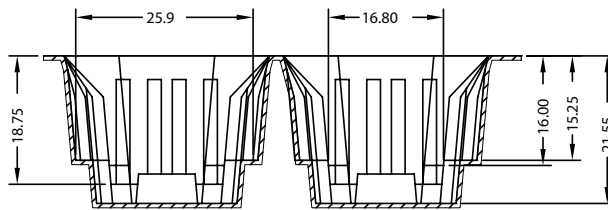
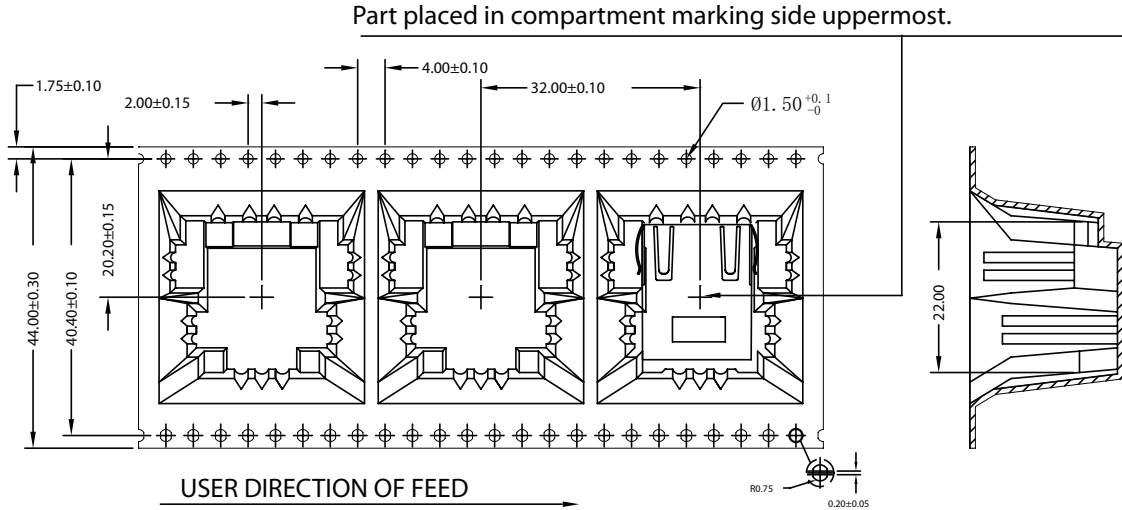
PCB LAYOUT DIMENSIONS REFERENCED TO PIN#1 AND  $\pm .003$  UNLESS OTHERWISE SPECIFIED

# PulseJack™ 1X1 Tab-Up RJ45

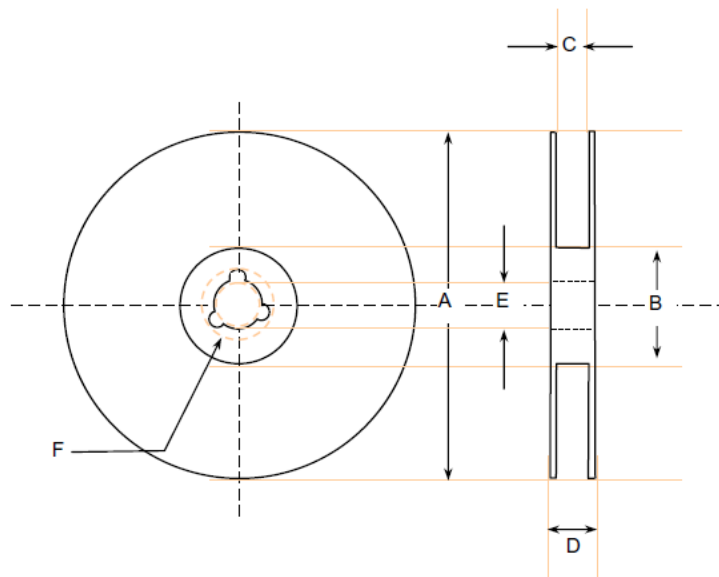
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## Tape and Reel Specification



**Dimensions:** given in mm  
Unless otherwise specified, all tolerances are  $\pm 0.15$



### PACKING SPECIFICATION:

JXR1-00xxNLT = TAPE and REEL .....80 parts/reel  
JXR1-00xxNL = TRAY .....25 parts

### REEL SPECIFICATION in mm

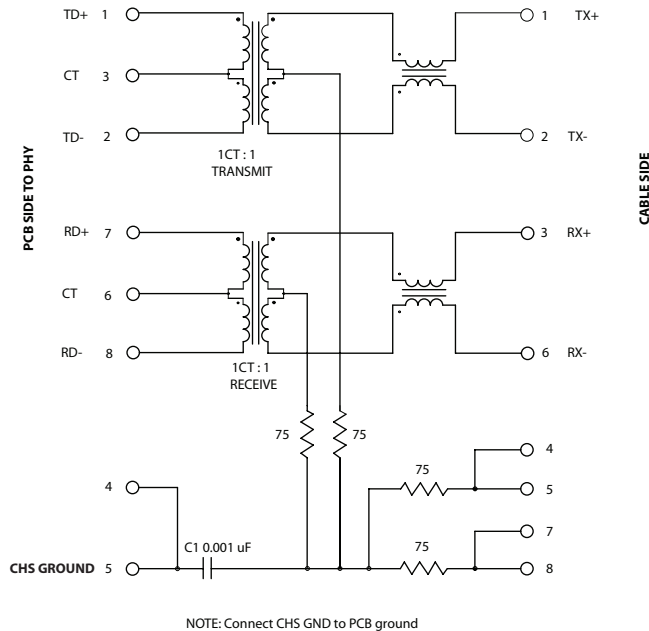
A =  $\varnothing 360.0 \pm 2.0$     C =  $\varnothing 45.4 \pm 1.0$     C =  $\varnothing 13.1 \pm 0.3$   
B =  $\varnothing 100.0 \pm 0.5$     D =  $\varnothing 50.4 \pm 1.0$     D =  $\varnothing 21.0 \pm 0.5$

# PulseJack™

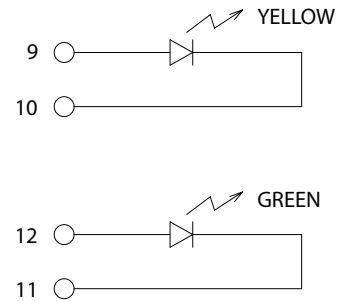
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### Electrical Schematic



### LED Specification



Emitted Color	Green	Yellow
<b>Wavelength (nm)</b>	585 nm	2.1 V
<b>Brightness (mCD)</b>	8 to 12 TYP. @ 20mA	8 to 12 TYP. @ 20 mA
<b>Viewing Angle</b>	100°	100°
<b>Power Dissipation (Pd)</b>	68 mW MAX	68 mW MAX
<b>DC Forward Current</b>	25 mA MAX	30 mA MAX
<b>Reverse Voltage (Vr)</b>	5.0 V MAX	5.0 V MAX

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