






# PulseJack™ 1X1 Tab-Down 10GBase-T RJ45

Designed to Support 10GBASE-T Transceivers



## Features and Benefits:

-  Compliant with IEEE 802.3 standard
-  Qualified with top 10Gig PHY Manufacturers
-  RoHS peak wave solder temperature rating 260°C
-  Low profile package for PCI Express
-  Fine-tune magnetics to specific PHY vendors

## Electrical Specifications @ 25°C - Operating Temperature 0°C to 70°C

RoHS Compliant Part Number	Channel Option	LEDs <sup>2</sup> (L/R)	Insertion Loss (dB or better)		Return Loss (dB or better)		Common to Differential Mode Rejection (dB or better)		Cross Talk (dB or better)		Hipot (V <sub>RMS</sub> MIN)
			100 KHz	1-400 MHz	1-40 MHz	40-500 MHz	1-250 MHz	250-500 MHz	1-100 MHz	100-500 MHz	
JT4-1108HL	5	G-Y/G	3.0	-2.0dB MAX (-1.4 dB TYP)	-22	-22 +18.27*LOG(f/100)	-30	-22	-30	-20	1500
JT4-1109HL	5	G-A/G-A	3.0	-2.0dB MAX (-1.4 dB TYP)	-22	-22 +18.27*LOG(f/100)	-30	-22	-30	-20	1500
JT4-1120HL	4	G-Y/G	3.0	-2.0dB MAX (-1.4 dB TYP)	-22	-17 +18.27*LOG(f/100)	-30	-22	-30	-20	1500

### Notes:

1. LEDs: (Left/Right) G = green, Y = yellow, A = amber

## RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JT4 Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20lbs./9.072 kgs.

## RJ45 Material Specification

Part Number	Shield		Contact			Housing		MSL <sup>2</sup> Rating
	Material	Finish	Material	Plating Area	Solder Area <sup>3</sup>	Material	Specification	
JT4 Series	Brass	50-200μ inches thick nickel over brass	Phosphor Bronze	50μ inches gold over 30-50μ inches nickel	200-500μ inches tin over 50-100μ inches nickel	Thermoplastic	UL 94 V-0	1

### Notes:

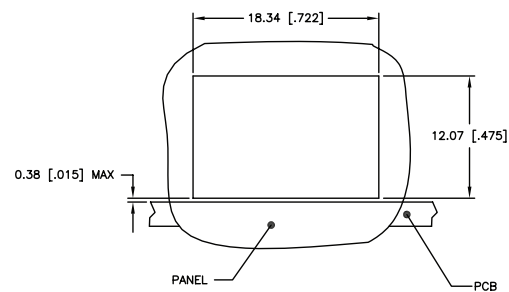
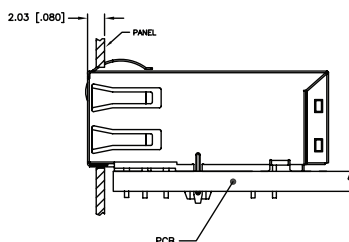
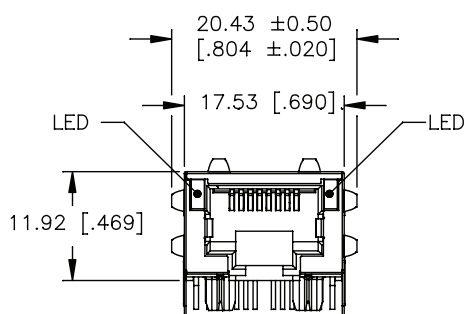
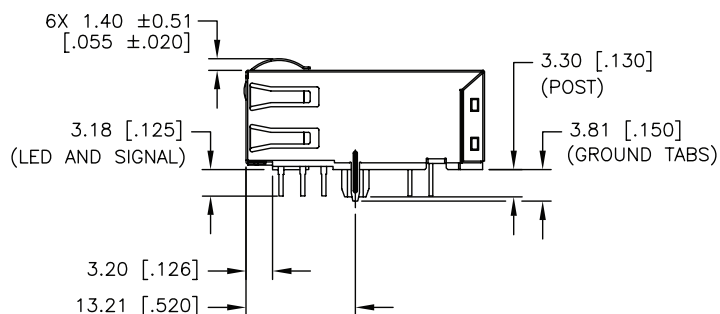
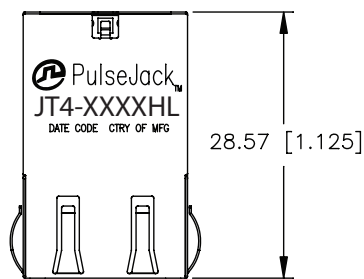
1. Connector dimensions comply with FCC dimension requirements.
2. MSL - Moisture Sensitivity Level
3. All parts are tin matte finish over nickel.

# PulseJack™ 1X1 Tab-Down 10GBase-T RJ45

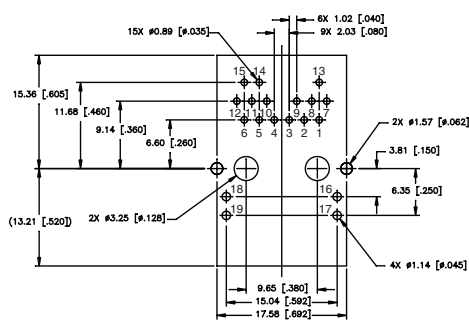
Designed to Support 10GBASE-T Transceivers

## Mechanicals

JT4-1108HL, JT4-1109HL, JT4-1120HL

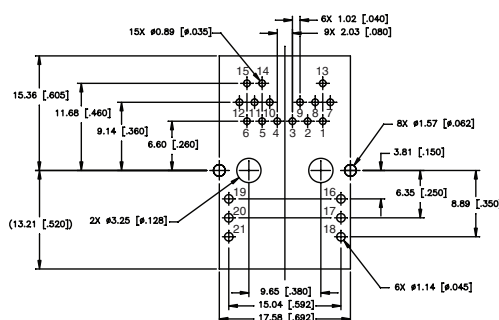


SUGGESTED PANEL CUTOUT



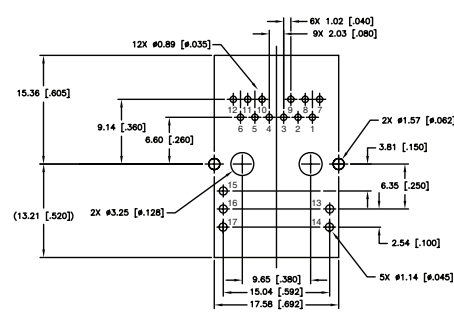
SUGGESTED FOOTPRINT (JT4-1108HL SIDE SHOWN)  
THE FOLLOWING TOLERANCES APPLY:  
x.xx [.xxx] = ±.008 [±.003]

JT4-1108HL



SUGGESTED FOOTPRINT (JT4-1109HL SIDE SHOWN)  
THE FOLLOWING TOLERANCES APPLY:  
x.xx [.xxx] = ±.008 [±.003]

JT4-1109HL



SUGGESTED FOOTPRINT (JT4-1120HL SIDE SHOWN)  
THE FOLLOWING TOLERANCES APPLY:  
x.xx [.xxx] = ±.008 [±.003]

JT4-1120HL

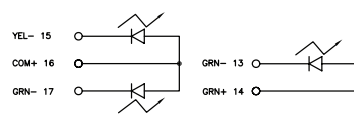
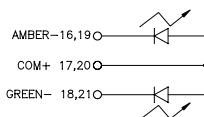
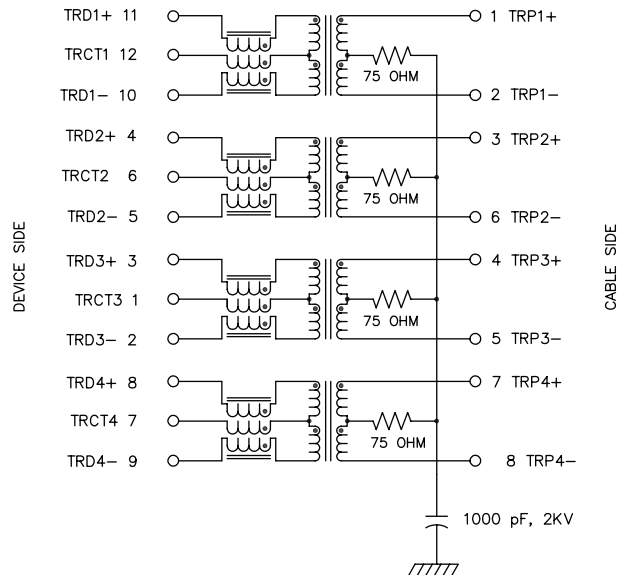
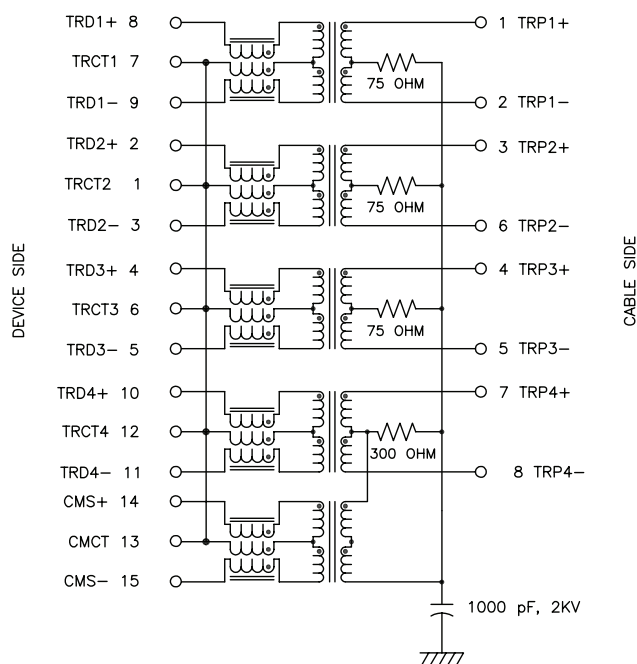
# PulseJack™ 1X1 Tab-Down 10GBase-T RJ45

Designed to Support 10GBASE-T Transceivers

## Schematics

### JT4-1108HL, JT4-1109HL

### JT4-1120HL



EMMITTED COLOR	GREEN	YELLOW
WAVELENGTH (nm)	565	588
POWER DISSIPATION (Pd)	105 mW MAX	100 mW MAX
DC FORWARD CURRENT	25 mA MAX	30 mA MAX
FORWARD VOLTAGE (VF) @20mA	2.2 V TYP	2.1 V TYP

NOTE: PER VENDOR'S SPECIFICATION

#### LED SPECIFICATION FOR JT4-1108HL

EMMITTED COLOR	GREEN	AMBER
WAVELENGTH (nm)	570	607
POWER DISSIPATION (Pd)	105 mW MAX	105 mW MAX
DC FORWARD CURRENT	25 mA MAX	30 mA MAX
FORWARD VOLTAGE (VF) @20mA	2.2 V TYP	2.1 V TYP

NOTE: PER VENDOR'S SPECIFICATION

#### LED SPECIFICATION FOR JT4-1109HL

EMMITTED COLOR	GREEN	YELLOW	GREEN
WAVELENGTH (nm)	565	588	565
POWER DISSIPATION (Pd)	105 mW MAX	100 mW MAX	105 mW MAX
DC FORWARD CURRENT	25 mA MAX	30 mA MAX	25 mA MAX
FORWARD VOLTAGE (VF) @20mA	2.2 V TYP	2.1 V TYP	2.2 V TYP

NOTE: PER VENDOR'S SPECIFICATION

#### LED SPECIFICATION FOR JT4-1120HL

## 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)

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, 2019. Pulse Electronics, Inc. All rights reserved.