

# 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
- Ⓢ RoHS compliant and Halogen Free

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

Part Number	Channel Option	LEDs <sup>2</sup> (L/R)	Insertion Loss (dB MAX)		Return Loss (dB MIN)				Common to Differential Mode Rejection (dB MIN)		Cross Talk (dB or better)		Hipot (V <sub>DC</sub> MIN)
			100 KHz	1-400 MHz	1-100 MHz	200 MHz	300 MHz	500 MHz	1-300 MHz	300-500 MHz	1-100 MHz	100-500 MHz	
JT4-1108HL*	5	G-Y/G	-3.0	-2.0	-22.0	-16.5	-13.2	-9	-30	-22	-28	-19	2250
JT4-1109HL*	5	G-A/G-A	-3.0	-2.0	-22.0	-16.5	-13.2	-9	-30	-22	-28	-19	2250
JT4-1120HL^	4	G-Y/G	-3.0	-2.0	-22.0	-16.5	-13.2	-9	-30	-22	-28	-19	2250
JT4-1128HL**	5	G-Y/G	-3.0	-2.0	-22.0	-16.5	-13.2	-9	-30	-22	-28	-19	2250
JT4-1160HL*	5	G-Y/G	-3.0	-2.0	-22.0	-16.5	-13.2	-9	-30	-22	-28	-19	2250
JT4-1173HL^	4	G/Y-G	-3.0	-2.0	-22.0	-16.5	-13.2	-9	-30	-22	-28	-19	2250

#### Notes:

1. LEDs: (Left/Right) G = green, Y = yellow, A = amber
2. PHY Vendors Approval - INTEL \*, MARVELL \*\*, BROADCOM ^

### 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	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

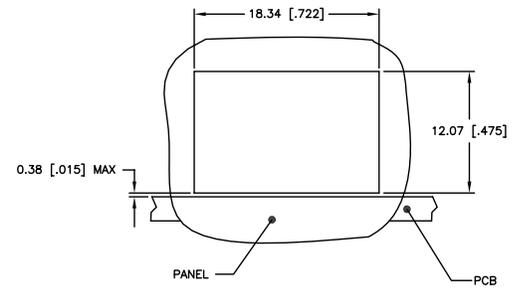
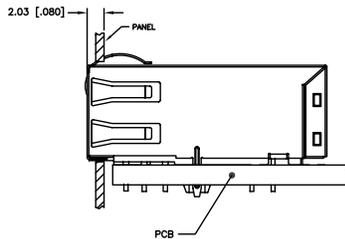
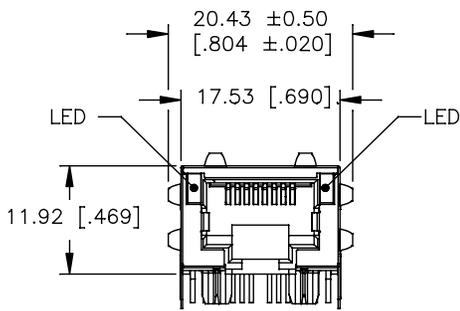
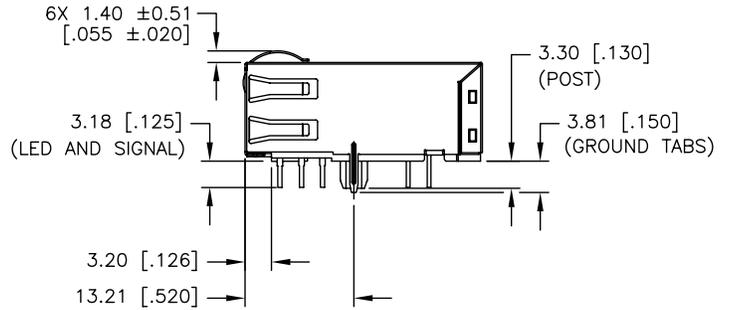
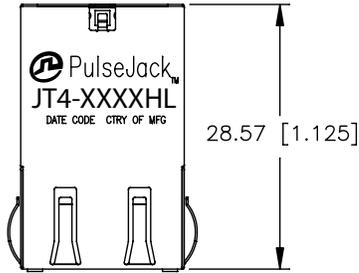
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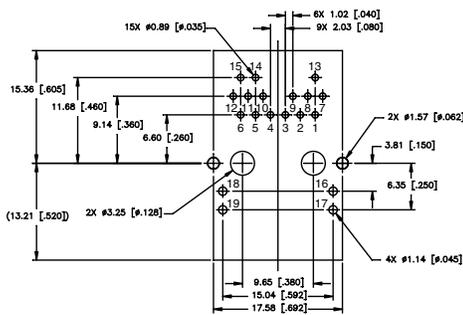


## Mechanicals

JT4-1108HL, JT4-1109HL, JT4-1120HL, JT4-1128HL, JT4-1160HL, JT4-1173HL

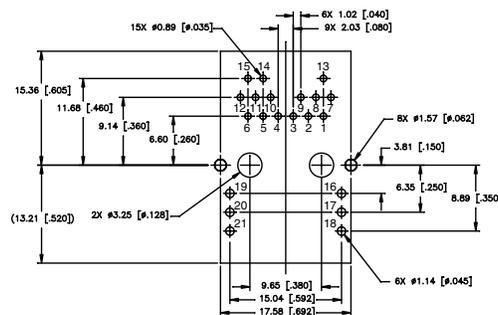


SUGGESTED PANEL CUTOUT



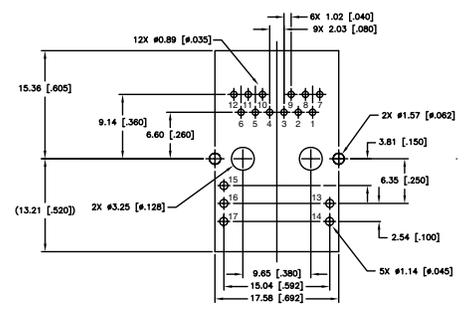
SUGGESTED FOOTPRINT (JT4-1108HL SIDE SHOWN)  
THE FOLLOWING TOLERANCES APPLY:  
x.xx [.xxx] = ±.008 [±.003]

JT4-1108/1128/1160HL



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]

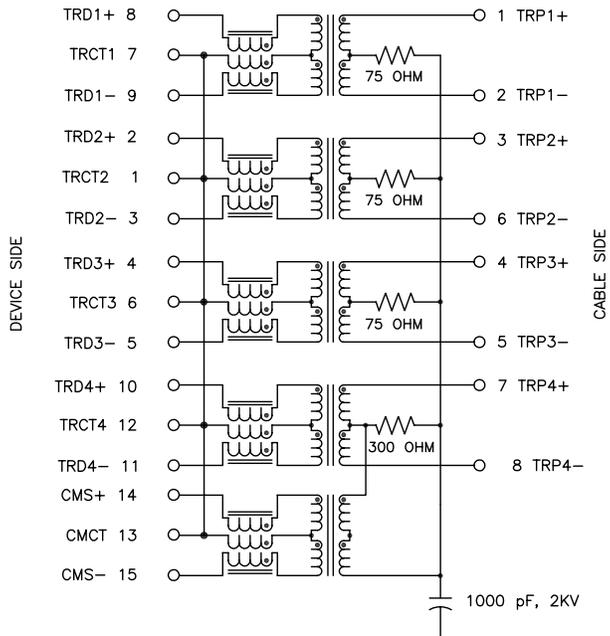
JT4-1120HL

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

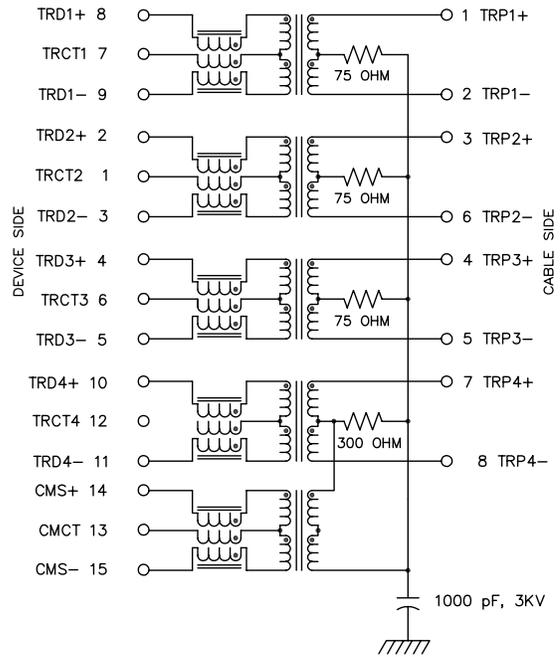
Designed to Support 10GBASE-T Transceivers

## Schematics

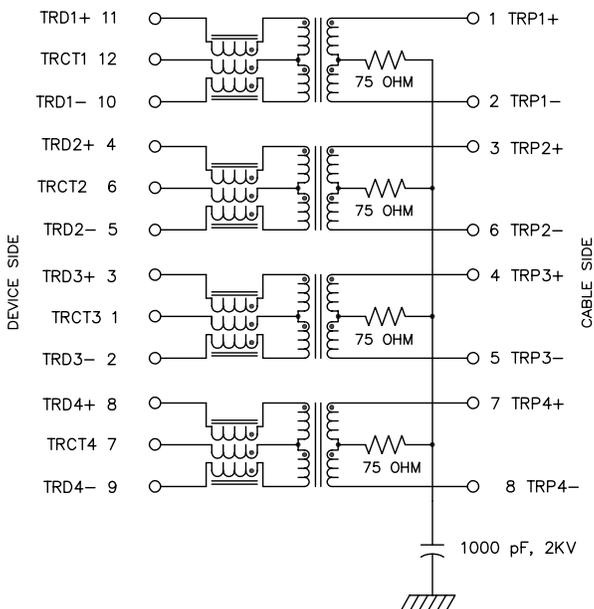
JT4-1108HL, JT4-1109HL



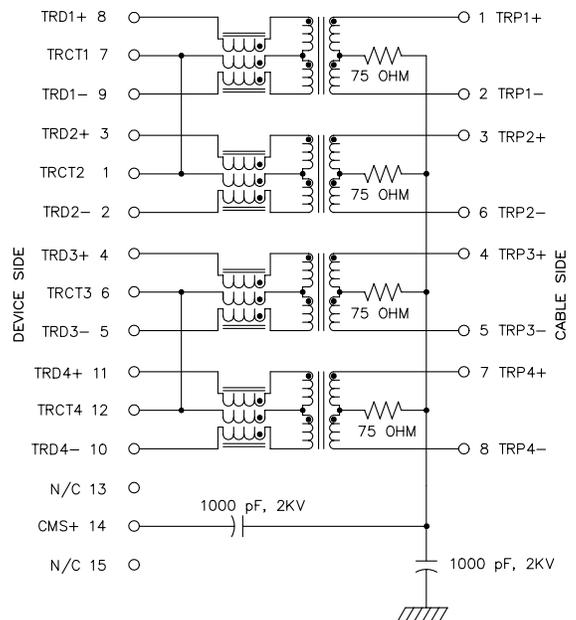
JT4-1160HL



JT4-1120HL



JT4-1128HL

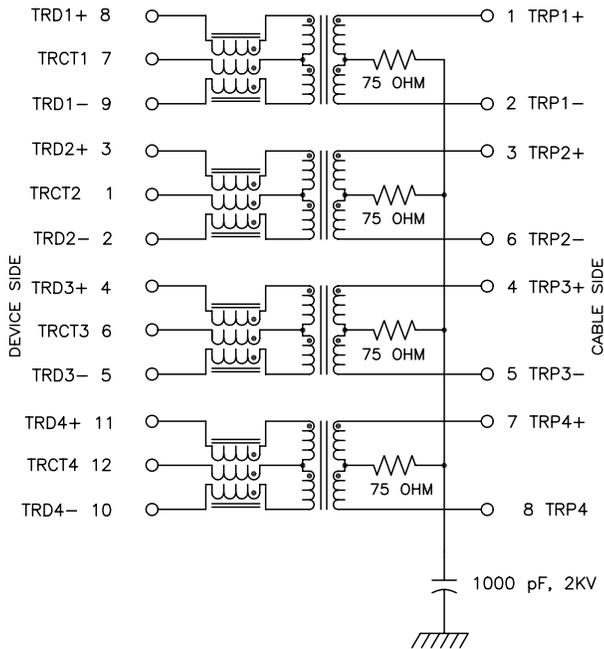


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## Schematic

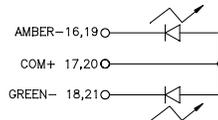
### JT4-1173HL



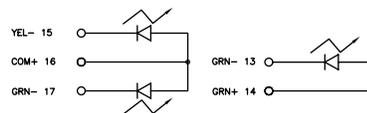
## LED SPECIFICATIONS



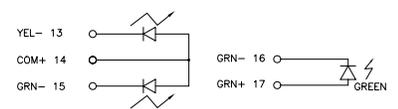
LED SPECIFICATION FOR JT4-1108/28/60HL



LED SPECIFICATION FOR JT4-1109HL



LED SPECIFICATION FOR JT4-1120HL



LED SPECIFICATION FOR JT4-1730HL

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

BICOLOR

NOTE: PER VENDOR'S SPECIFICATION

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

BICOLOR

NOTE: PER VENDOR'S SPECIFICATION

### For More Information:

Americas - [prodinfonetworkamericas@pulseelectronics.com](mailto:prodinfonetworkamericas@pulseelectronics.com) | Europe - [comms-apps-europe@pulseelectronics.com](mailto:comms-apps-europe@pulseelectronics.com) | Asia - [prodinfonetworkapac@pulseelectronics.com](mailto:prodinfonetworkapac@pulseelectronics.com)

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