

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 ² (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 _{RMS} MIN)
			100 KHz	1-400 MHz	1-40 MHz	40-500 MHz	1-250 MHz	250-500 MHz	1-100 MHz	100-500 MHz	
JTH-0020NL	4	G-Y/G	3.0	-2.0dB MAX (-1.4 dB TYP)	-22	-11 -23.25*LOG(f/400)	-30	-22	-30	-20	1500
JTH-0024NL	4	G/G-Y	3.0	-2.0dB MAX (-1.4 dB TYP)	-22	-17+ 10*LOG(f/40)	-30	-22	-30	-20	1500
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	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
2. Weight: JTH = 7.20 grams, JT4 = 8.68 grams

RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JTH/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 ² Rating
	Material	Finish	Material	Plating Area	Solder Area ³	Material	Specification	
JTH/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.

USA 858 674 8100

Germany 49 7032 7806 0

Singapore 65 6287 8998

Shanghai 86 21 62787060

China 86 755 33966678

Taiwan 886 3 4356768

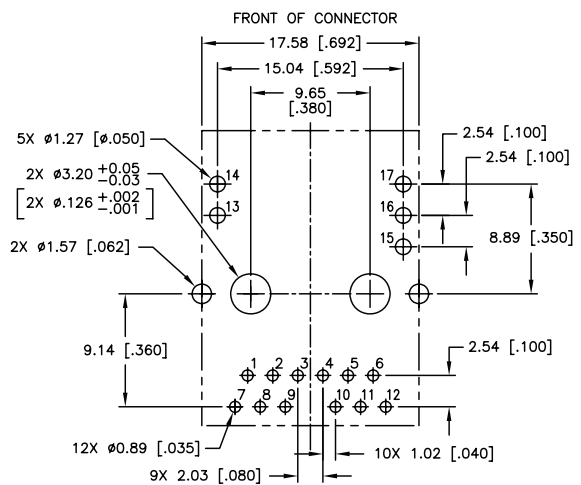
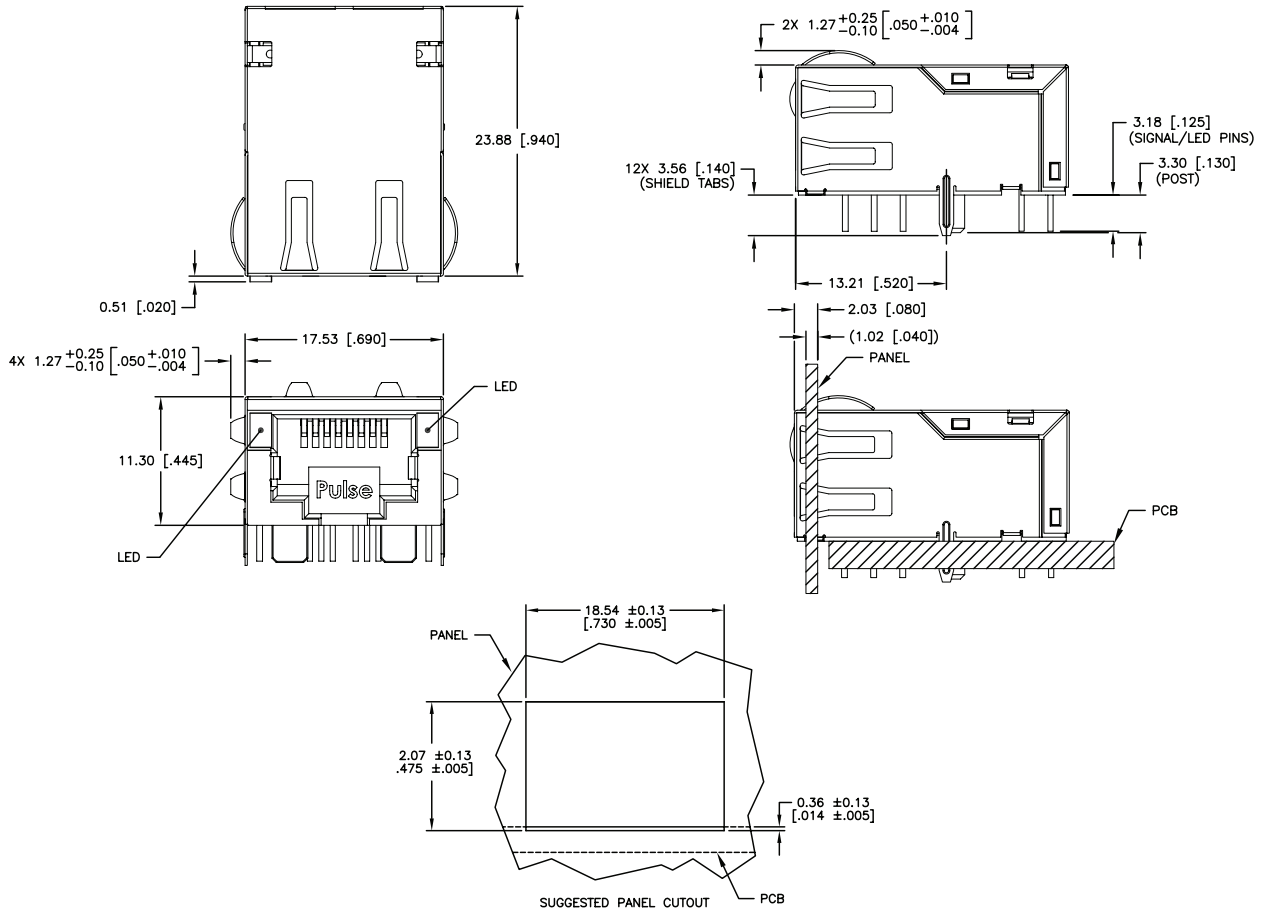
PulseJack™ 1X1 Tab-Down 10GBase-T RJ45

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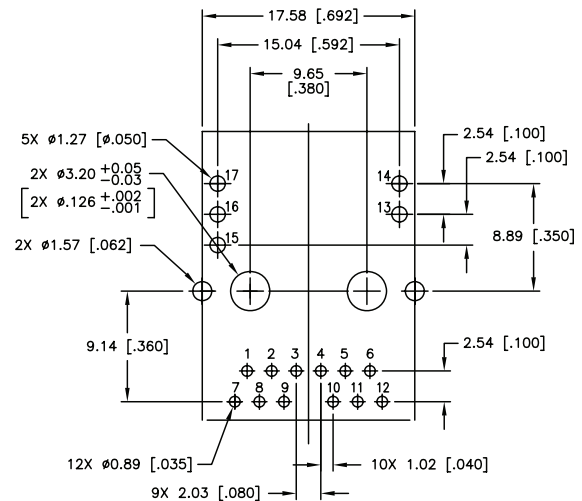


Mechanicals

JTH-0020NL, JTH-0024NL



SUGGESTED FOOTPRINT (JTH-0020NL SIDE SHOWN)
DIMENSIONAL TOLERANCE: (UNLESS OTHERWISE SPECIFIED)
.XX [XXX] = ±0.05 [0.002]



SUGGESTED FOOTPRINT (JTH-0024NL SIDE SHOWN)
DIMENSIONAL TOLERANCE: (UNLESS OTHERWISE SPECIFIED)
XX [XXX] = ±0.05 [0.002]

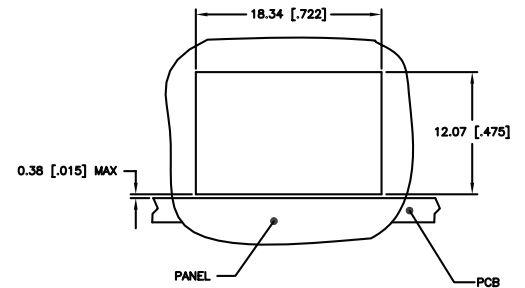
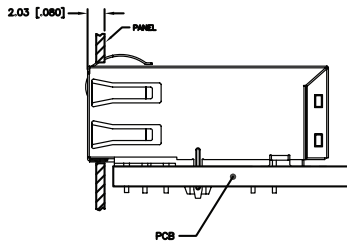
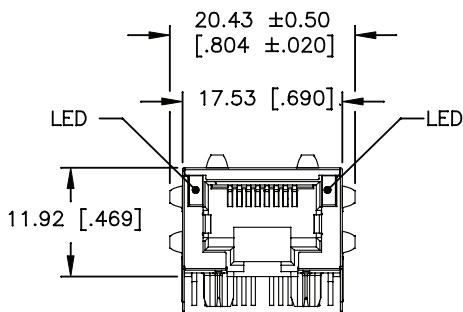
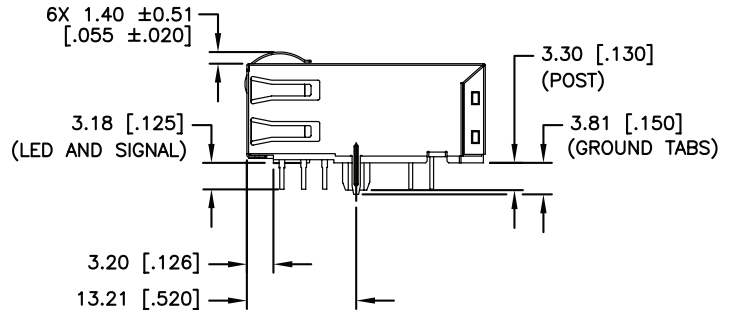
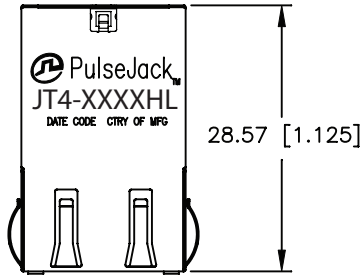
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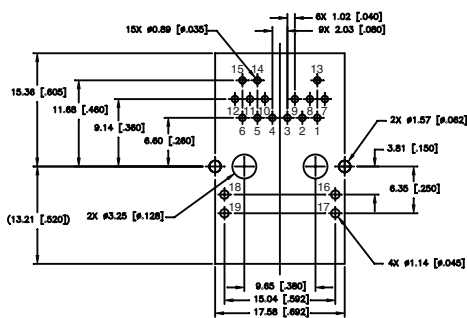


Mechanicals (continued)

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

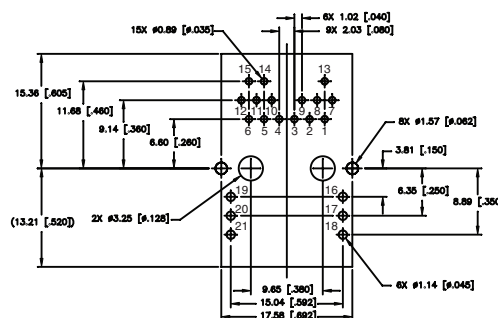


SUGGESTED PANEL CUTOUT



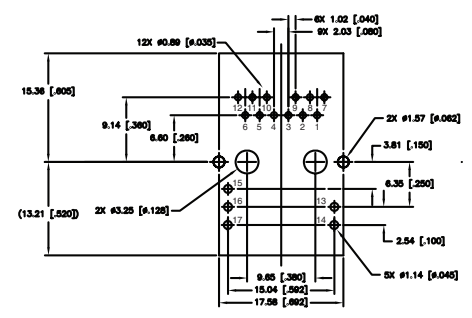
SUGGESTED FOOTPRINT (JT4-1108HL SIDE SHOWN)
THE FOLLOWING TOLERANCES APPLY:
x.xx [.xxx] = ±.008 [±.003]

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

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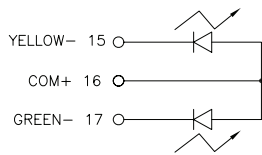
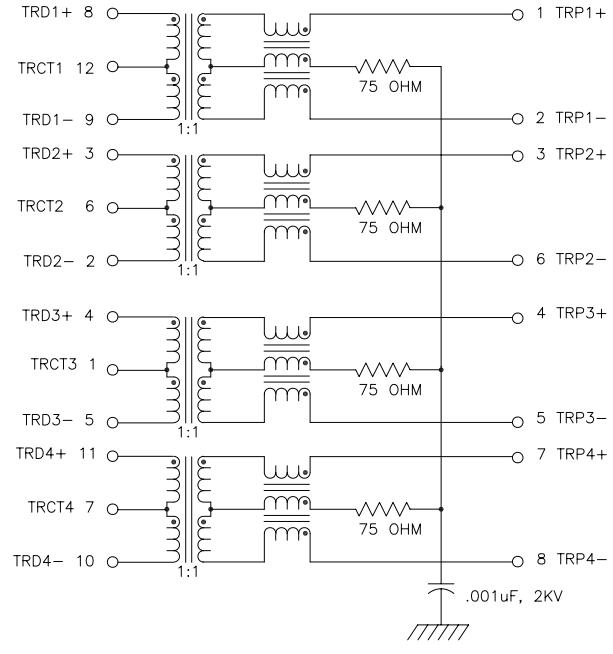
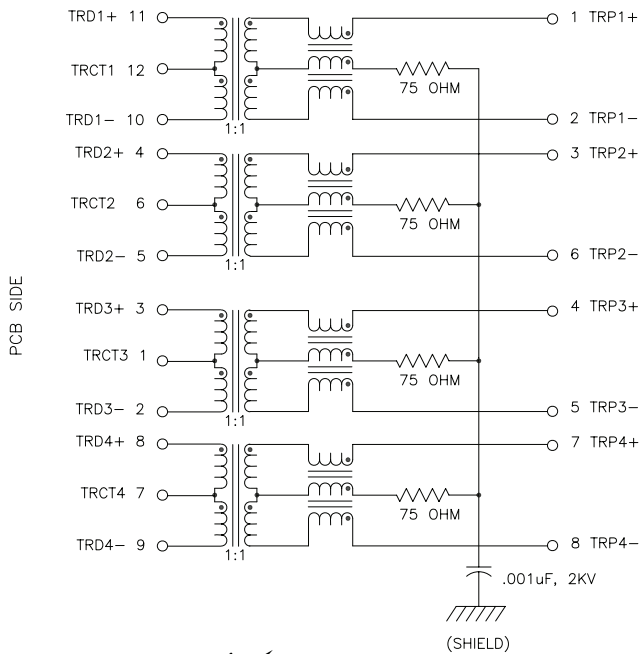
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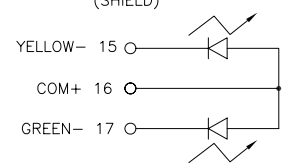
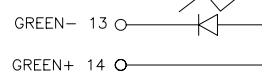
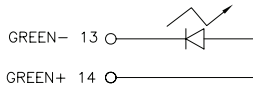
Schematics

JTH-0020NL

JTH-0024NL



SCHEMATIC



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

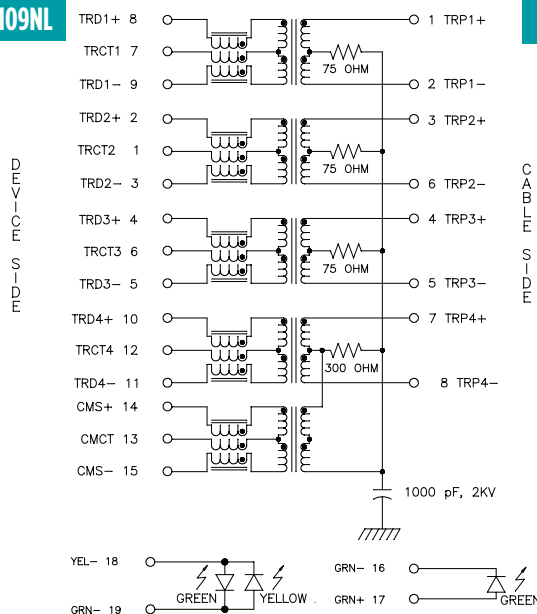
NOTE: PER VENDOR'S SPECIFICATION

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Schematics (continued)

JT4-1108HL, JT4-1109NL

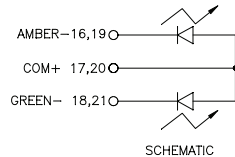


EMMITTED COLOR	GREEN	YELLOW
WAVELENGTH (nm)	565	588
POWER DISSIPATION (Pd)	105 mW MAX	100 mW MAX
DC FORWARD CURRENT	25 mA MAX	30 mA MAX
FORWARD VOLTAGE (VF) @20mA	2.2 V TYP	2.1 V TYP

BICOLOR

NOTE: PER VENDOR'S SPECIFICATION

LED SPECIFICATION FOR JT4-1108HL



SCHEMATIC

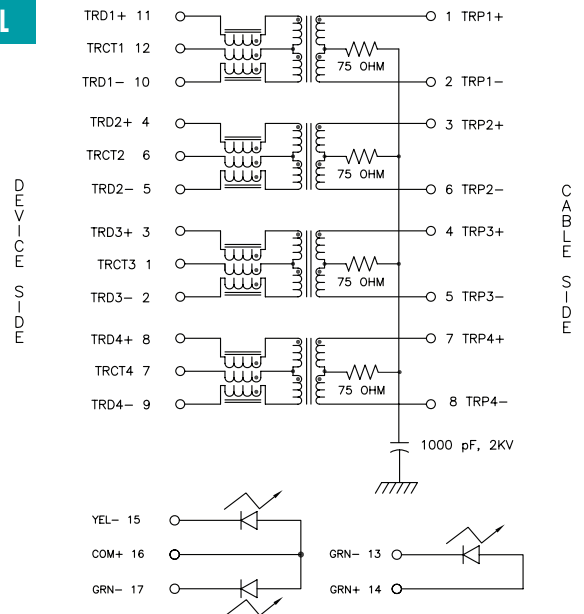
EMMITTED COLOR	GREEN	AMBER
WAVELENGTH (nm)	570	607
POWER DISSIPATION (Pd)	105 mW MAX	105 mW MAX
DC FORWARD CURRENT	25 mA MAX	30 mA MAX
FORWARD VOLTAGE (VF) @20mA	2.2 V TYP	2.1 V TYP

BICOLOR

NOTE: PER VENDOR'S SPECIFICATION

LED SPECIFICATION FOR JT4-1109HL

JT4-1120HL



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

SCHEMATIC (EACH PORT)

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