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			Insertion Loss (dB or better)		Return Loss (dB or better)		Common to Differential Mode Rejection (dB or better)		Cross Talk (dB or better)		Hipot	
Part Number	Channel Option	LEDs ² (L/R)	100 KHz	1-400 MHz	1-40 MHz	40-500 MHz	1-250 MHz	250-500 MHz	1-100 MHz	100-500 MHz	(V _{RMS} MIN)	
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*L0G(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										
	Shield Contact Housing									
Part					7			MSL ²		
Number	Material	Finish	Material	Plating Area	Solder Area ³	Material	Specification	Rating		
JT4 Series		50-200µ inches thick nickel	Phosphor	50µ inches gold over	200-500µ inches tin					
J14 Jelle3	Brass	over brass	Bronze	30-50µ inches nickel	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

pulseelectronics.com J425.N (1/17)

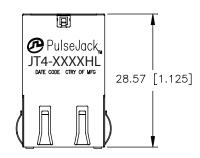
PulseJack™ 1X1 Tab-Down 10GBase-T RJ45

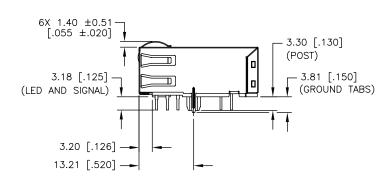
Designed to Support 10GBASE-T Transceivers

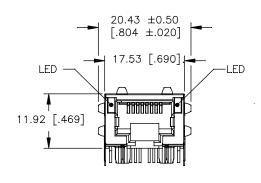


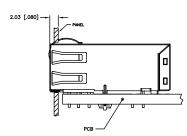
Mechanicals

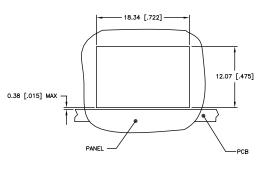
JT4-1108HL, JT4-1109HL, JT4-1120HL



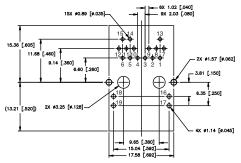


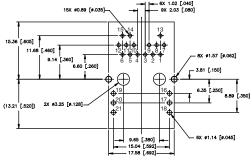


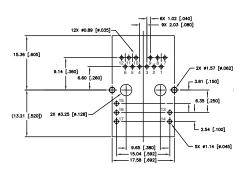




SUGGESTED PANEL CUTOUT







SUGGESTED FOOTPRINT (JT4-1108HL SIDE SHOWN) THE FOLLOWING TOLERANCES APPLY:

 $x.xx[.xxx] = \pm .008[\pm .003]$

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

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

JT4-1108HL

JT4-1109HL

JT4-1120HL

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Schematics

JT4-1108HL, JT4-1109HL JT4-1120HL TRD1+ 11 O 1 TRP1+ TRD1+ 8 1 TRP1+ TRCT1 12 TRCT1 7 75 OHM 75 OHM TRD1- 10 O 2 TRP1-O 2 TRP1-TRD1-9 TRD2+ 4 O 3 TRP2+ TRD2+ 2 O 3 TRP2+ TRCT2 6 TRCT2 75 OHM TRD2- 5 O 6 TRP2-TRD2- 3 -O 6 TRP2-SIDE TRD3+ 3 O 4 TRP3+ TRD3+ 4 O 4 TRP3+ TRCT3 1 TRCT3 6 75 OHM 75 OHM TRD3- 2 O 5 TRP3--O 5 TRP3-TRD3- 5 O 7 TRP4+ TRD4+ 8 O 7 TRP4+ TRD4+ 10 TRCT4 7 111. TRCT4 12 75 OHM 300 ОНМ TRD4- 9 8 TRP4-TRD4- 11 8 TRP4-CMS+ 14 1000 pF, 2KV W CMCT 13 וווווו CMS- 15 1000 pF, 2KV וולוד

EMMITTED COLOR	GREEN	YELLOW	EMMITTED COLOR	GREEN	AMBER	EMMITTED COLOR	GREEN	YELLOW	GREEN
WAVELENGTH (nM)	565	588	WAVELENGTH (nM)	570	607	WAVELENGTH (nM)	565	588	565
POWER DISSIPATION (Pd)	105 mW MAX	100 mW MAX	POWER DISSIPATION (Pd)	105 mW MAX	105 mW MAX	POWER DISSIPATION (Pd)	105 mW MAX	100 mW MAX	105 mW MAX
DC FORWARD CURRENT	25 mA MAX	30 mA MAX	DC FORWARD CURRENT	25 mA MAX	30 mA 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	FORWARD VOLTAGE (VF) @20mA	2.2 V TYP	2.1 V TYP	FORWARD VOLTAGE (VF) @20mA	2.2 V TYP	2.1 V TYP	2.2 V TYP
	BICC	OLOR —	-	BICC	OLOR -		BICC BICC	I OR	

LED SPECIFICATION FOR JT4-1108HL

NOTE: PER VENDOR'S SPECIFICATION

LED SPECIFICATION FOR JT4-1109HL

NOTE: PER VENDOR'S SPECIFICATION

LED SPECIFICATION FOR JT4-1120HL

NOTE: PER VENDOR'S SPECIFICATION

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