

Features

Description:

- ◆ RJ45/Dual USB Combo is a Through Hole integrated connector module with a single RJ45 Tab-UP in combination with USB connector ports (refer to illustration below). The RJ45 connector internal magnetics are designed to support 10/100/1000Base-TX applications such as LAN-on-Motherboard and PC applications.

Features and Benefits:

- ◆ LAN interface suitable for 10/100/1000Base-TX applications
- ◆ RJ45/USB stacked design saves on PCB real estate
- ◆ USB module complies with USB 2.0 standards and meets CAT5 Fast Ethernet industry performance standard
- ◆ Magnetics are 100% electrically tested for HI-POT and continuity

Electrical Performance Summary:

- ◆ Internal magnetics options available
- ◆ Meets or exceeds IEEE 802.3 and ANSI X3.263 standards
- ◆ 350 uH minimum OCL with 8 mA bias current
- ◆ High performance for maximum EMI suppression
- ◆ Minimum 2250 DCVrms isolation per IEEE 802.3i/u/af requirement
- ◆ Meets IEEE 802.3 HiPot isolation requirements

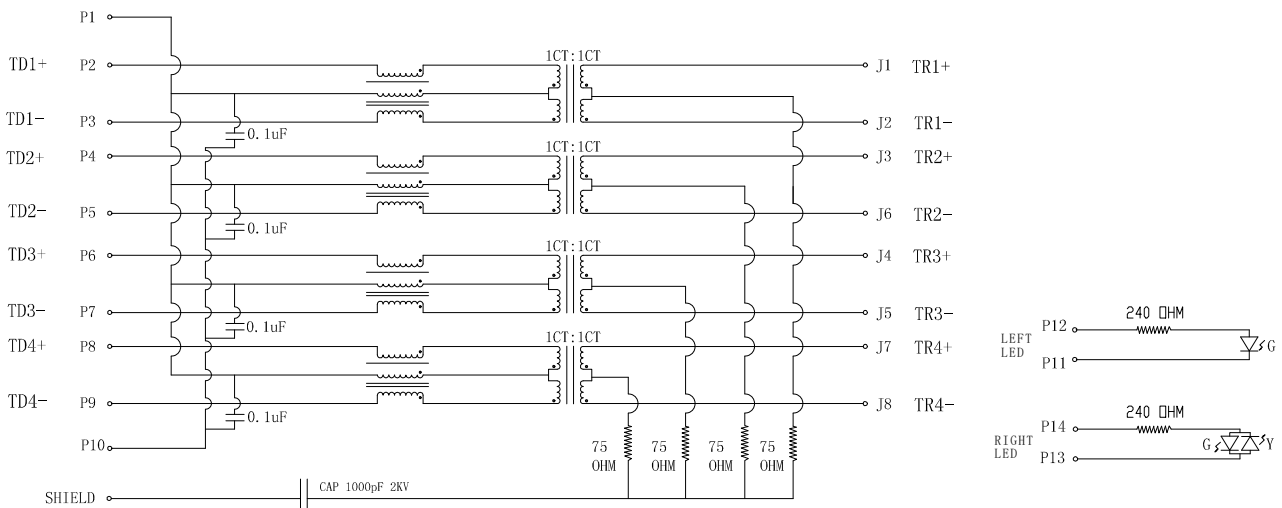
SPEC

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

Part Number	EMI Fingers	Turns Ratios		LEDs L/R	Insertion Loss (dB MAX)				Return Loss (dB TYP) (100Ω ± 15Ω)			Crosstalk (dB MIN)		Common Mode Rejection (dB TYP)		Hipot (DC Vrms MIN)
		TX	RX	L/R	1~65 MHz	1~10 MHz	30 MHz	60~80 MHz	1~10 MHz	32~60 MHz	60~100 MHz	1~50 MHz	50~130 MHz	@60 Hz		
RJ-501G10	N/A	1CT:1	1CT:1	G/G&Y	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	2250		

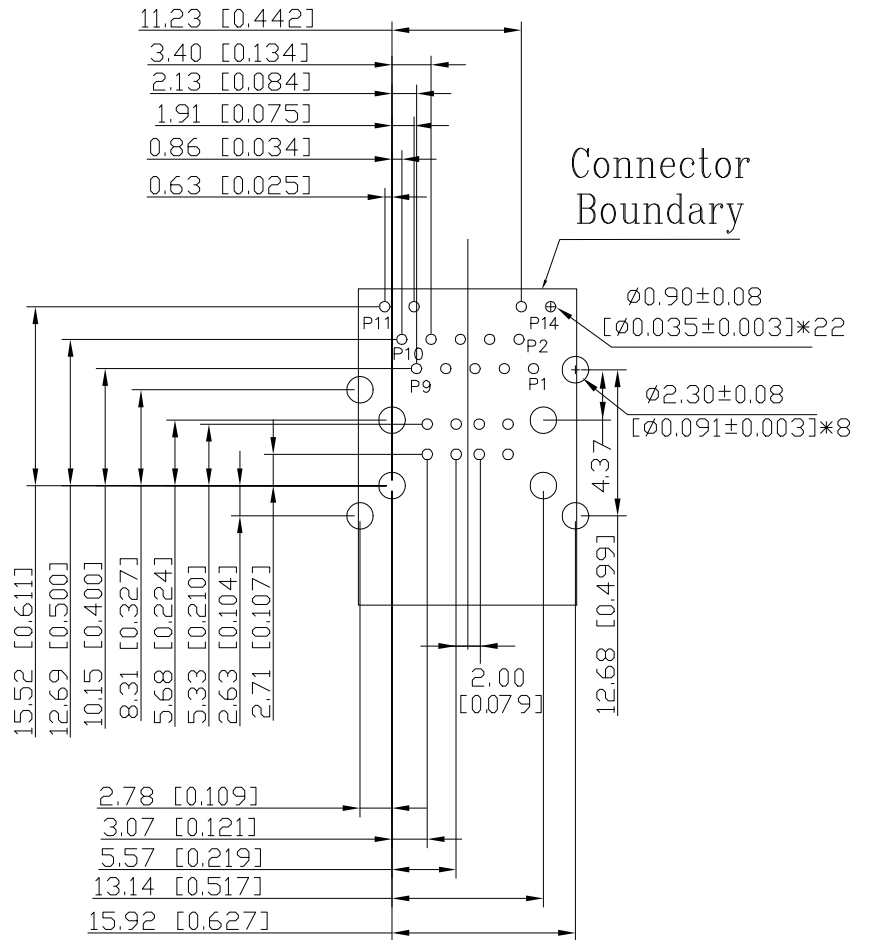
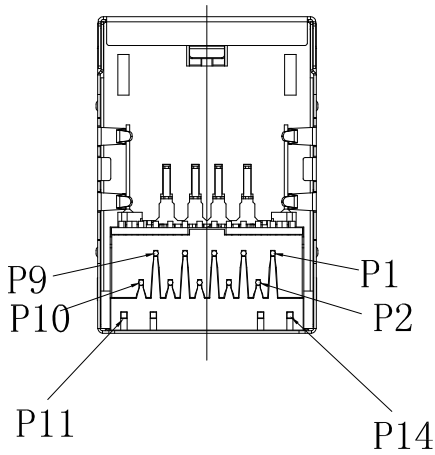
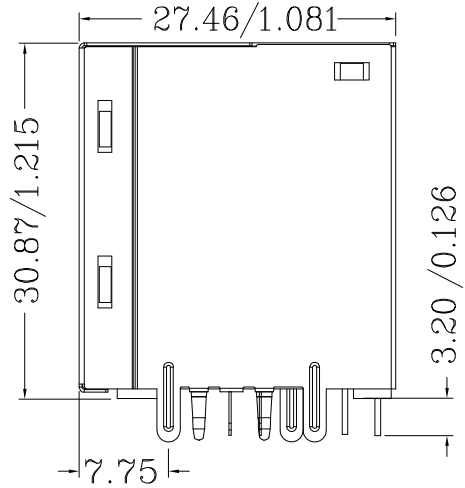
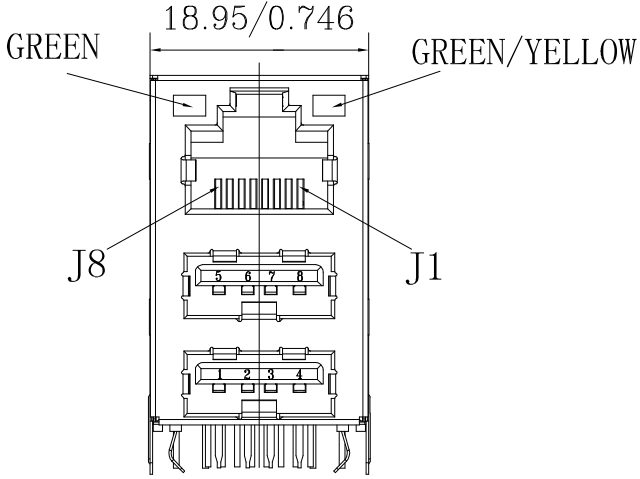
NOTE: 1. Both transmit and receive channels meet IEEE 802.3 specifications
 2. Different electrical and mechanical specifications can be accommodated
 3. LEDs Left/Right: G=green, Y=Yellow, O=Orange.

Schematics



Note: Connect GND to PCB ground

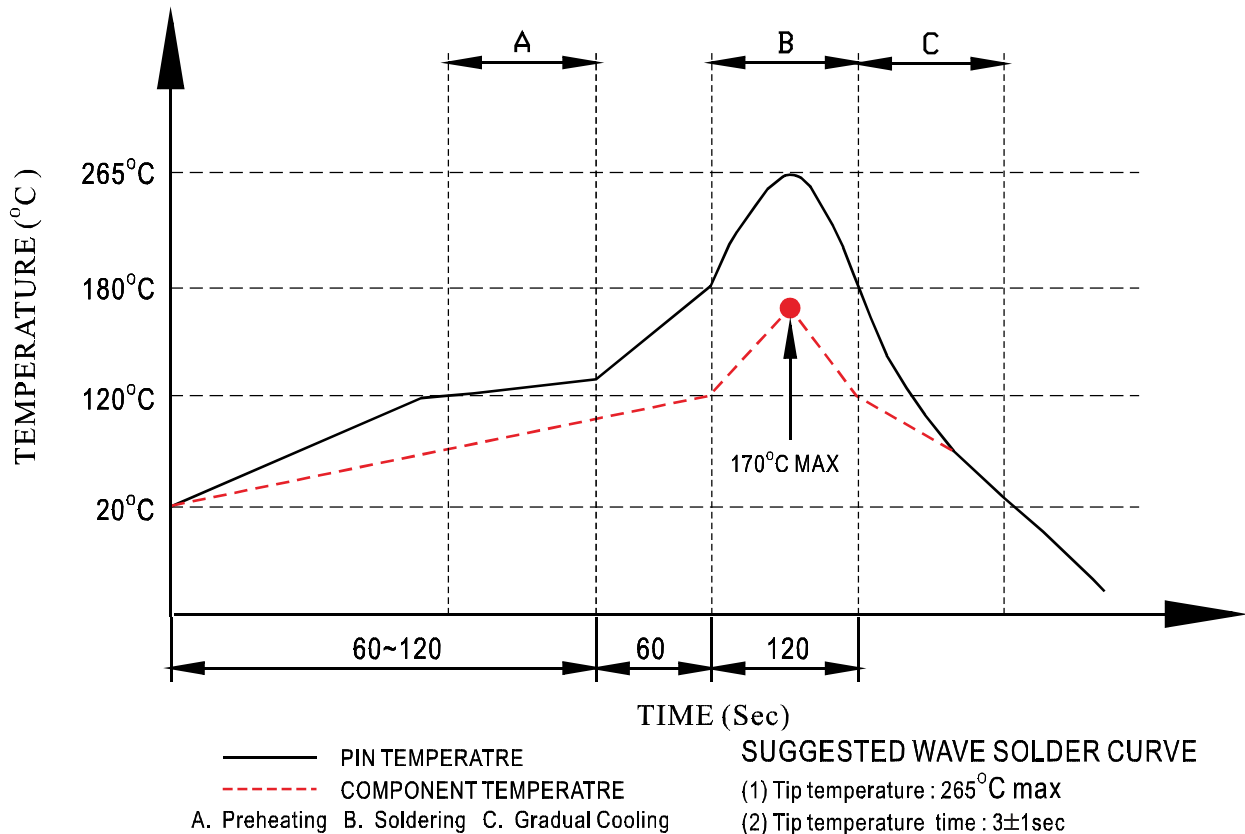
Mechanicals



VIEWDE FORM PCB CMPONENT SIDE

UNIT: mm / inch
 Tolerances: ±0.10 / 0.004

Profile of wave solder



*The melting point of Sn99.3/Cu0.7

REQUIREMENTS

- ◆ Material
 - ◇ Terminal Parts(Underphating:30u" min. Nickel overall)
 - RJ Terminal: PH. Bronze, Thickness=0.3mm, Finish: Contact Area: 6u" Gold
 - Input Terminal: Brass, Thickness=0.35mm, Finish: 100u" min. Mt. Tin
 - Case Terminal: Brass, Thickness=0.3mm, Finish: 100u" min. Tin
 - ◇ Plastic Parts<UL94V-0>
 - Housing: Thermoplastic, Black
 - Case: Thermoplastic, Black
 - Spacer: Thermoplastic, Black
 - Light Pipe: Thermoplastic, Black
 - ◇ Shield Parts
 - Front Shield: Stainless, Thickness=0.2mm, unplating
 - Back Shield: Stainless, Thickness=0.2mm, Pre-soldering
- ◆ Operating and Storage Temperature
 - Operating Temperature: 0°C to +70°C
 - Storage Temperature: -40°C to +85°C
- ◆ RJ45 Specifications
 - Insulation Resistance 500MΩmin
 - Insertion force with the latch depressed 22N max
 - Removal force with the latch depressed 44N max
 - Locking Force of Plug Latch: 50N min. @60±5 sec
 - Durability: 750 cycles MIN