

PULSEJACK™

RJ45/Dual USB Combo

Description:

RJ45/Dual USB Combo is a Through Hole (THT) Integrated Connector Module (ICM) with a single RJ45 Tab-UP in combination with two USB connector ports (refer to illustration below). The RJ45 connector internal magnetics are designed to support 10/100Base-TX applications such as LAN-on-Motherboard (LOM) and PC applications.



Features and Benefits:

- LAN interface available in 6, 8 and 10 pin configurations for 10/100Base-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:

- Many magnetics and LED options available
- Meets or exceeds IEEE 802.3 and ANSI X3.263 standards including 350 μ H minimum OCL with 8 mA bias
- High performance for maximum EMI suppression
- Minimum 1500 Vrms isolation per IEEE 802.3 requirement

Electrical Specifications @ 25°C — Operating Temperature 0°C to +70°C

Part Number	Turns ^{1,2} Ratios		LEDs ³	Insertion Loss TX/RX (dB MAX)	Return Loss (dB MIN) 100 Ω ±15 Ω			Crosstalk (dB MIN)			Common Mode Rejection (dB TYP)		Hipot (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	
JU054P01R	1CT:1	1CT:1CT	G/Y ⁵	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	1500
J6026M51U	1CT:1CT	1CT:1CT	G-O/Y	-1.0	-20	-16	-12	-40	-35	-30	-30	-20	1500

Notes:

- Both transmit and receive channels meet IEEE 802.3 specifications.
- Different electrical and mechanical specifications can be accommodated. For more information, contact Pulse Applications Engineering at (858) 674-8100.
- LEDs Left/Right: G = green; Y = yellow.
- Option for IC grade transfer-molded package withstands 235°C IR reflow.
- G = Green with 250 Ω internal resistor; Y = Yellow with 250 Ω internal resistor.

RJ45 Durability Testing Rating

Part Number	Mating Force (MAX)	Unmating Force (MAX)	Durability	Plug to Jack Retention (MIN)
JU/J6 Series	5 lbs./2.268 kgs.	5 lbs./2.268 kgs.	750 Insertions	20 lbs./9.072 kgs.

RJ45 Material Specification

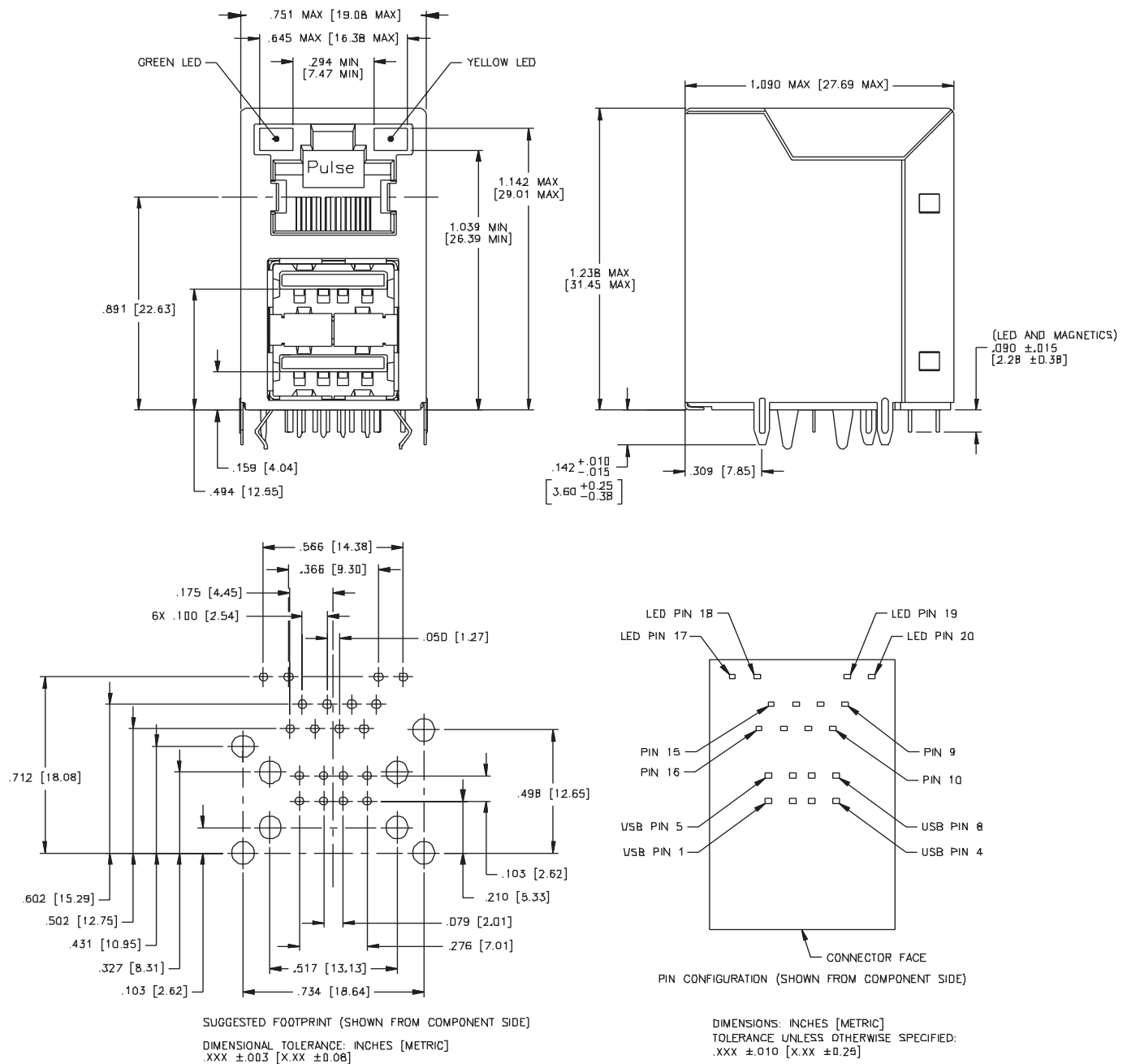
Part Number	Shield		Contact			Housing	
	Material	Finish	Material	Plating Area	Solder Area	Material	Specification
JU/J6 Series	Brass	10-20 μ inches thick nickel over 10-20 μ inches thick nickel	Phosphor Bronze	15 μ inches gold over 30-80 μ inches nickel	75-300 μ inches tin-lead over 75-300 μ inches bright nickel	Thermoplastic	UL 94 V-0

Notes:

- All connector part numbers starting with the series prefix JU or J6 comply to the above limits.
- Connector dimensions comply with FCC dimension requirements.

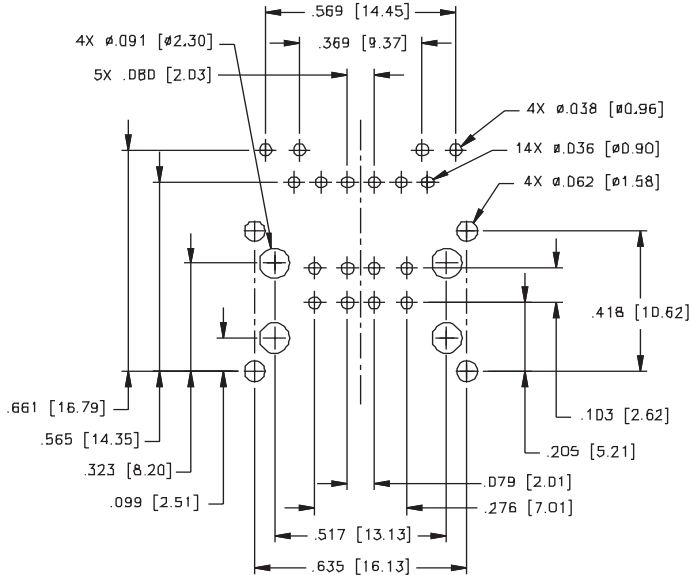
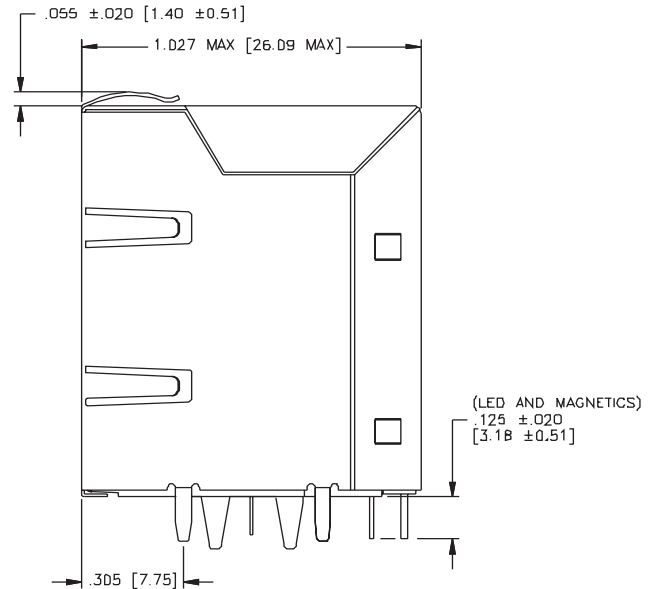
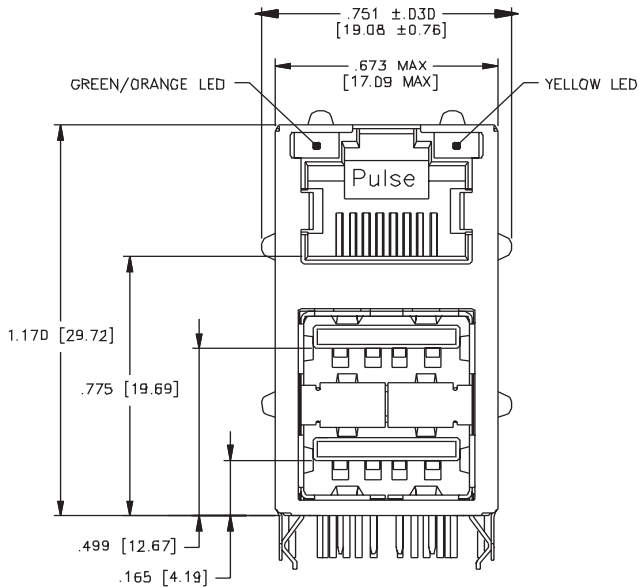
Mechanical

JU054P01R

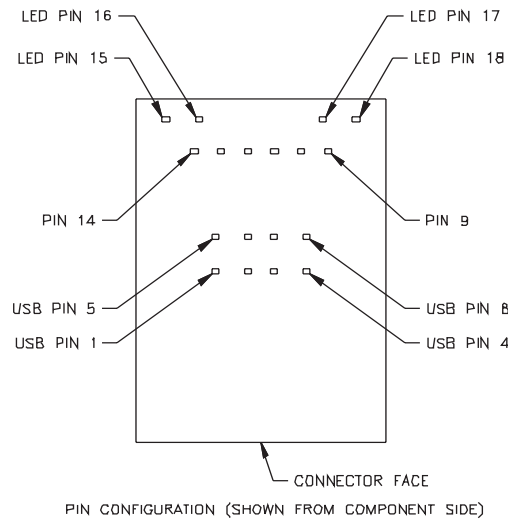


Mechanical

J6026M51U



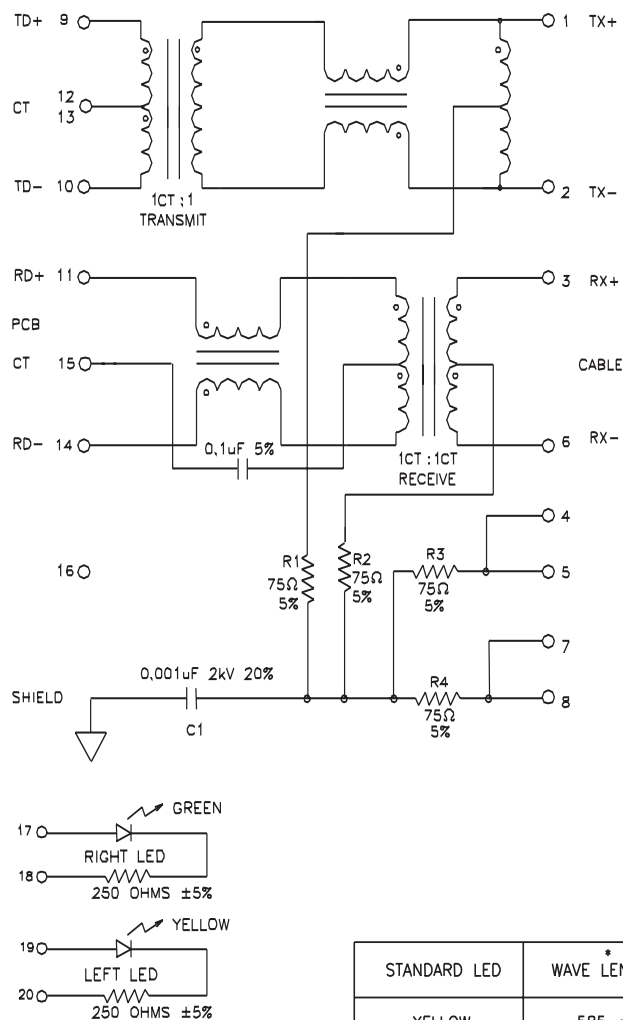
SUGGESTED FOOTPRINT (SHOWN FROM COMPONENT SIDE)
DIMENSIONAL TOLERANCE: INCHES [METRIC]
.XXX $\pm .003$ [X.XX ± 0.08]



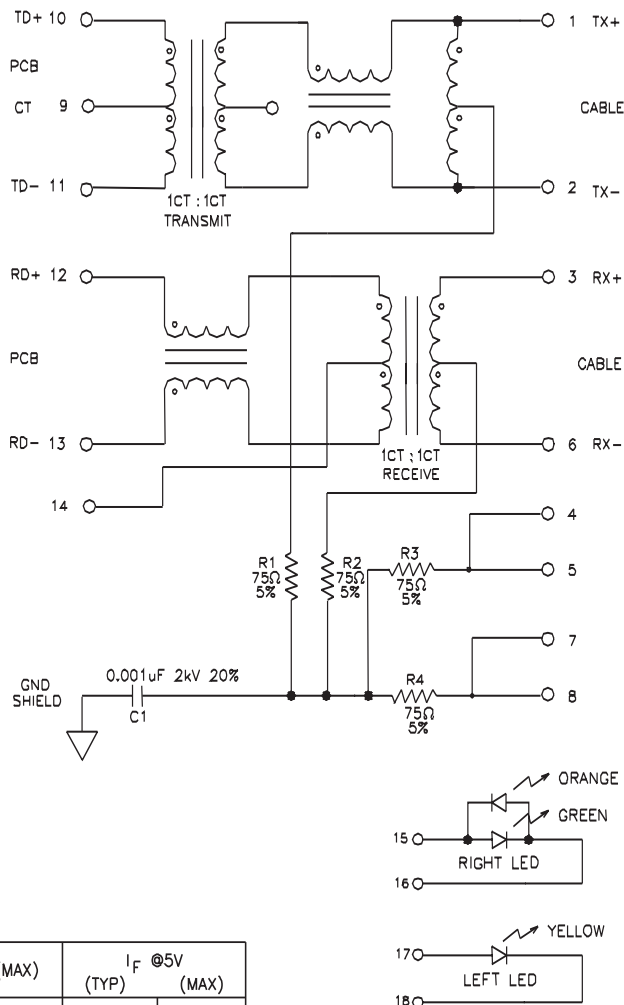
DIMENSIONS: INCHES [METRIC]
TOLERANCE UNLESS OTHERWISE SPECIFIED:
.XXX $\pm .010$ [X.XX ± 0.25]

Schematics

JU054P01R



J6026M51U



STANDARD LED	WAVE * LENGTH	V(MAX)	I _F @5V	
			(TYP)	(MAX)
YELLOW	585 nm	5 V	10 mA	15 mA
GREEN	565 nm	5 V	10 mA	15 mA
GREEN/ORANGE	568/610 nm	5 V	10 mA	15 mA
GREEN/YELLOW	568/590 nm	5 V	10 mA	15 mA

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