

# INTEGRATED CONNECTOR MODULES

## 10/100Base-TX belCombo™ with LEDs

BM01817

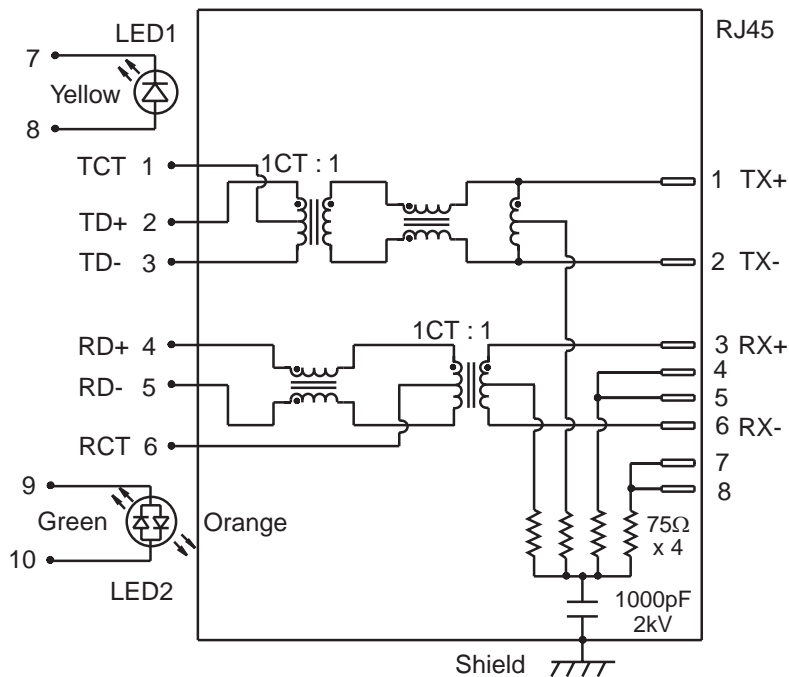
- Shielded RJ-45 connector with integrated 10/100 magnetics and dual USB connectors
- Compatible with a variety of 10/100 transceiver ICs
- Operating temperature 0° to +70° C
- Storage temperature -40° to +85° C
- Complies with IEEE standards and all 10/100 Ethernet specifications including 350µH with 8mA DC bias
- Highly integrated design conserves valuable board space
- Minimum interwinding breakdown voltage of 1500 Vrms
- Adaptable, modular design provides higher reliability

### ELECTRICAL SPECIFICATIONS AT 25° C

Part Number	Insertion Loss dB max	Return Loss dB min			Common to Differential Mode Rejection dB min	Common to Common Mode Rejection dB min	Crosstalk dB min
	1MHz to 100MHz	1MHz to 30MHz	30MHz to 60MHz	60MHz to 80MHz	100kHz to 100MHz		100kHz to 100MHz
0812-1X1T-03	-1.0	-18	18 - 20 log (f/30MHz)	-12	-35	-30	-35

### SCHEMATIC

0812-1X1T-03



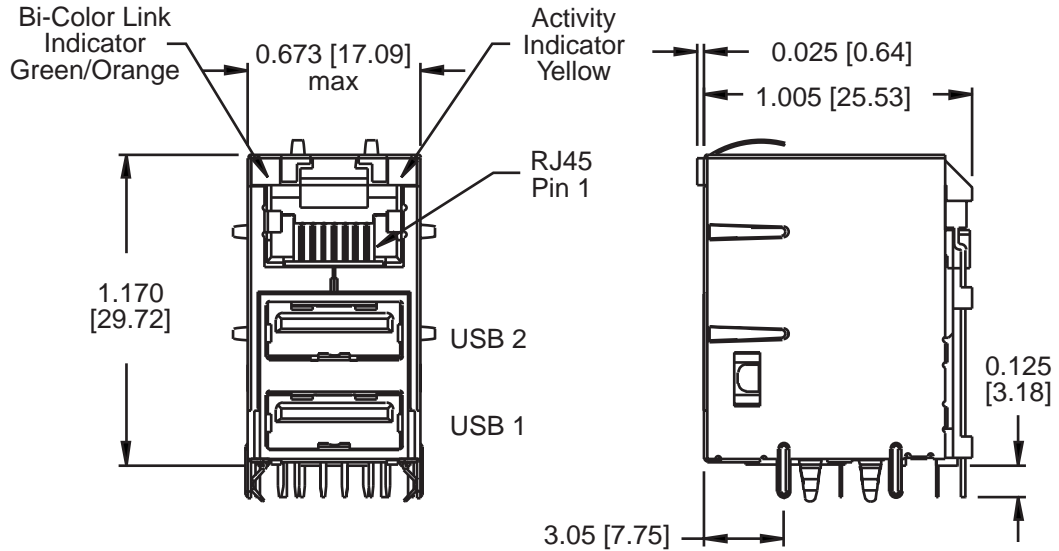
#### Available Options

- Various transformer turns ratios
- Various high voltage capacitor values
- Various LED color combinations

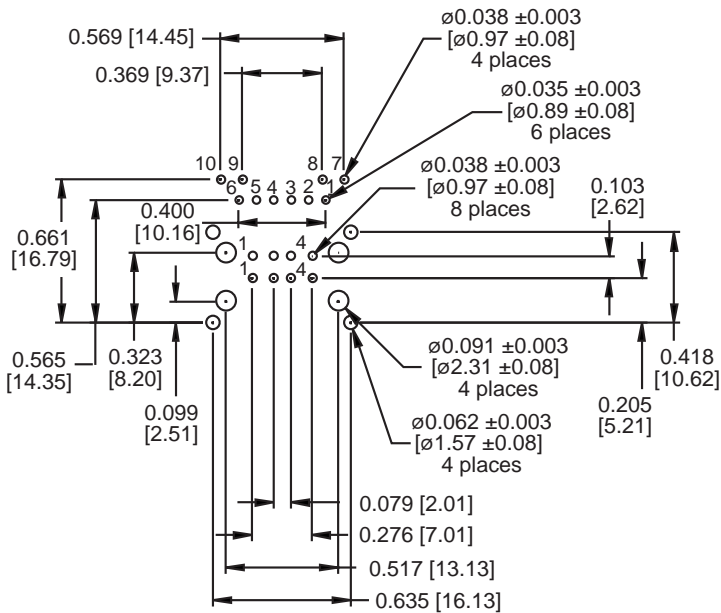
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### MECHANICAL

0812-1X1T-03



### PAD LAYOUT



Suggested PCB Pad Layout  
Component Side View

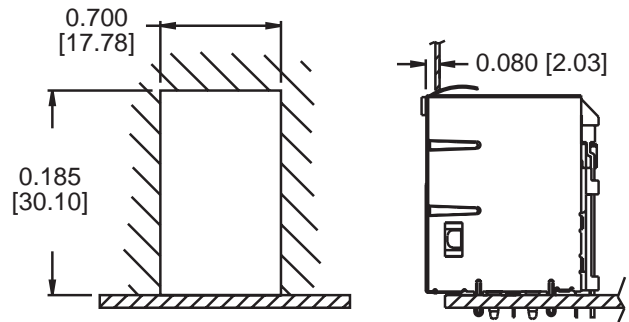
### Notes

#### RJ-45 Mechanical

Plastic Housing Thermoplastic, flammability rating UL 94V-0  
 Contacts 50 micro-inch hard gold plating  
 Pins Tin-coated copper wire, DIA 0.018" [0.46]  
 Solderability Per MIL Std. 202, Method 208  
 Metal Shield Nickel plated copper alloy

#### USB Mechanical

Mating Force 35 Newtons maximum  
 Unmating Force 10 Newtons minimum  
 Contact Phosphor bronze gold plating on contact area and tin on solder tail



Suggested Panel Opening

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