

# INTEGRATED CONNECTOR MODULES

## 10/100Base-TX belStick™ with LEDs

BM01812

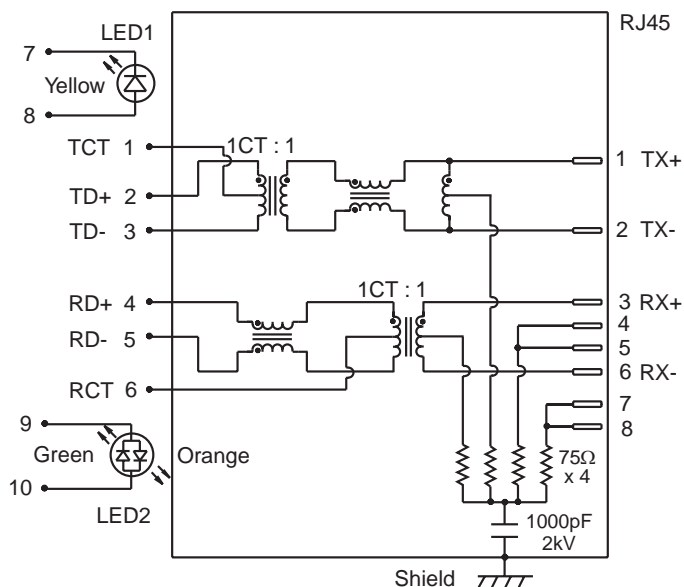
- Quad port shielded RJ-45 connector with integrated 10/100 magnetics
- Compatible with a variety of 10/100 transceiver ICs
- Operating temperature 0° to +70° C
- Storage temperature -40° to +85° C
- 0810-1X4T-06 design supports AutoMDIX applications
- Complies with IEEE standards and all 10/100 Ethernet specifications including 350µH with 8mA DC bias
- Integrated design conserves valuable board space
- Minimum interwinding breakdown voltage of 1500 Vrms
- Adaptable, modular design provides higher reliability
- Reduced pin count for improved crosstalk and optimum PCB trace routing

### 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	1MHz	30MHz	50MHz
0810-1X4T-03	-1.0	-18	18 - 20 log (f/30MHz)	-12	-40	-30	-70	-45	-40	-35	
0810-1X4T-04	-1.0	-18	18 - 20 log (f/30MHz)	-12	-40	-30	-70	-45	-40	-35	
0810-1X4T-06	-1.0	-18	18 - 20 log (f/30MHz)	-12	-40	-30	-70	-45	-40	-35	

### SCHEMATIC

0810-1X4T-03

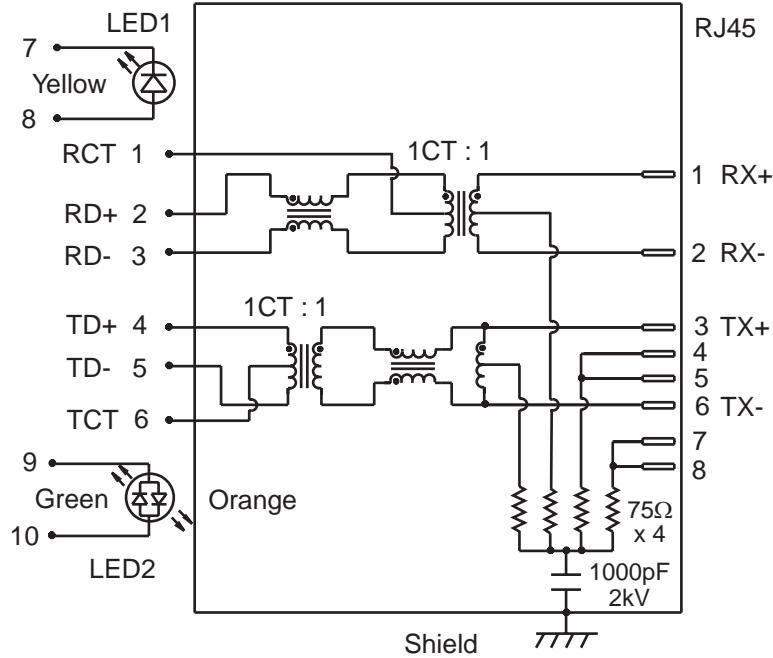


- Available Options**
- Various transformer turns ratios
  - Various high voltage capacitor values
  - Various LED color combinations

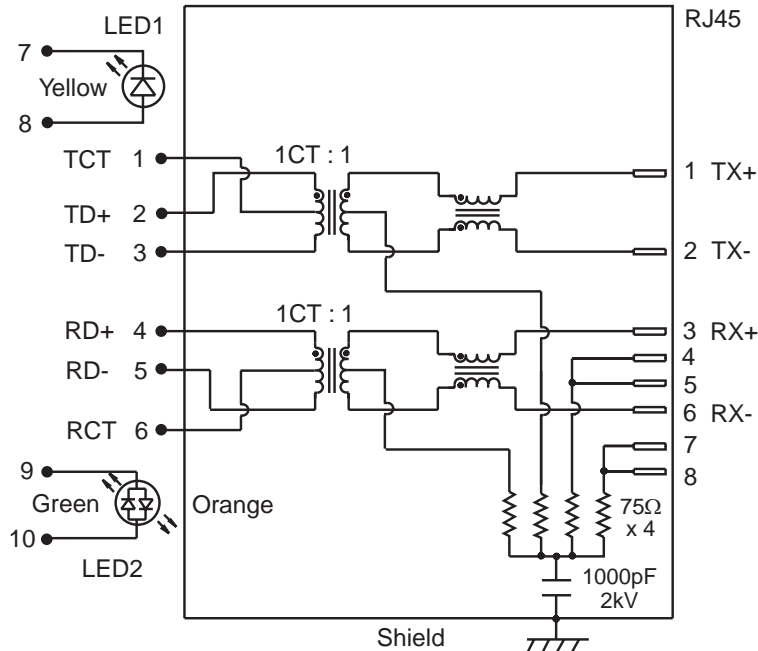
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### SCHEMATIC

0810-1X4T-04



0810-1X4T-06



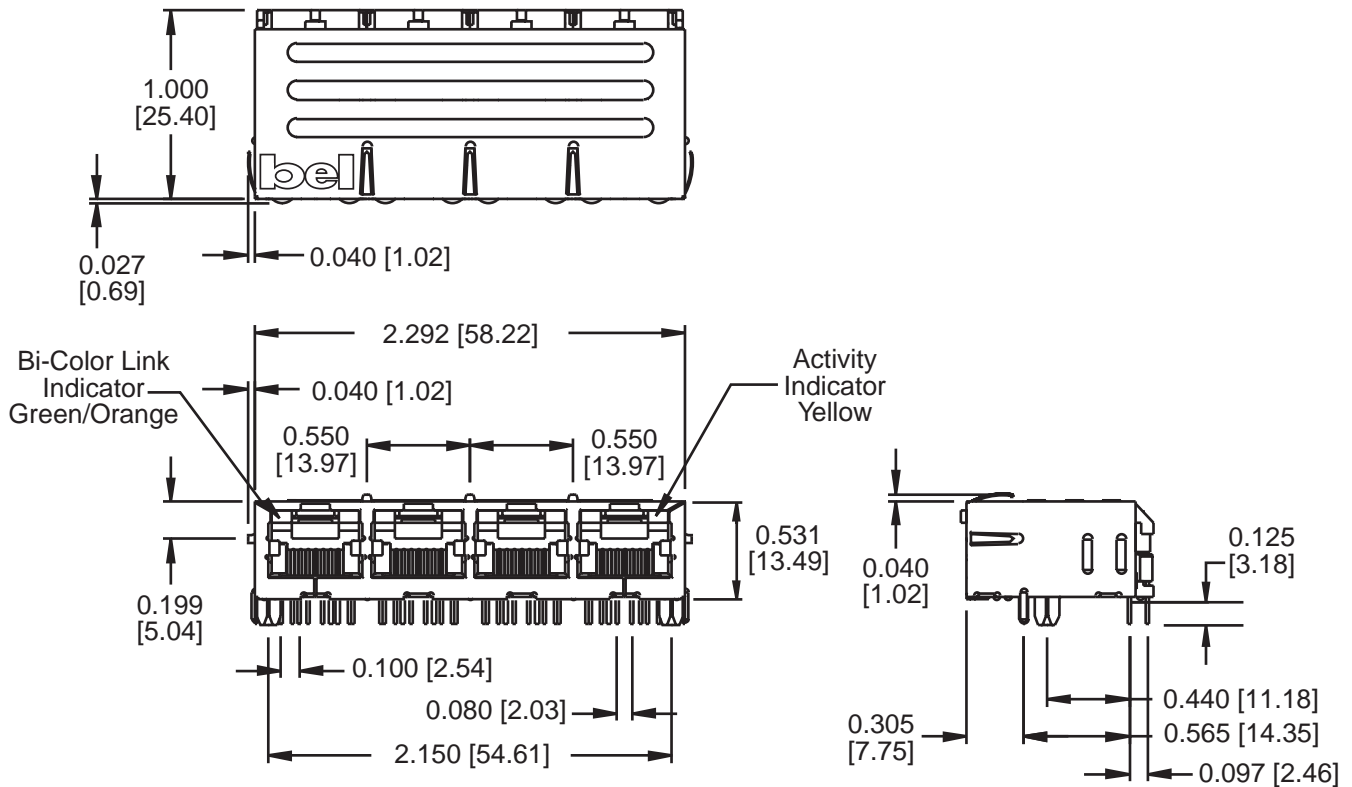
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### MECHANICAL

0810-1X4T-03  
0810-1X4T-04  
0810-1X4T-06



Dimensions are in inches [millimeters].  
Standard dimension tolerance is  $\pm 0.010$  [0.25] unless otherwise noted.

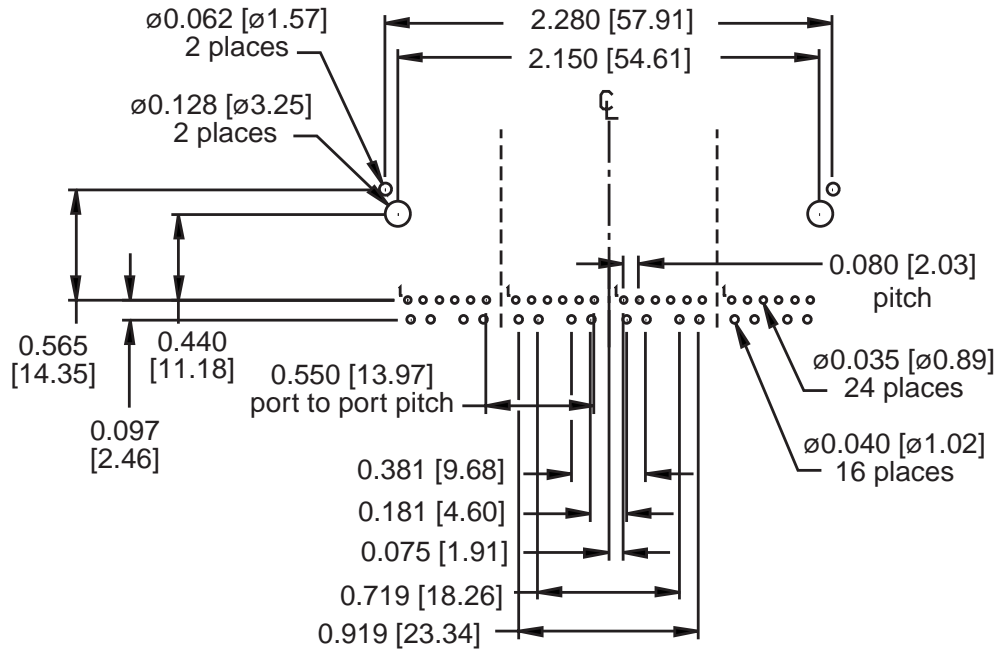
### Notes

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

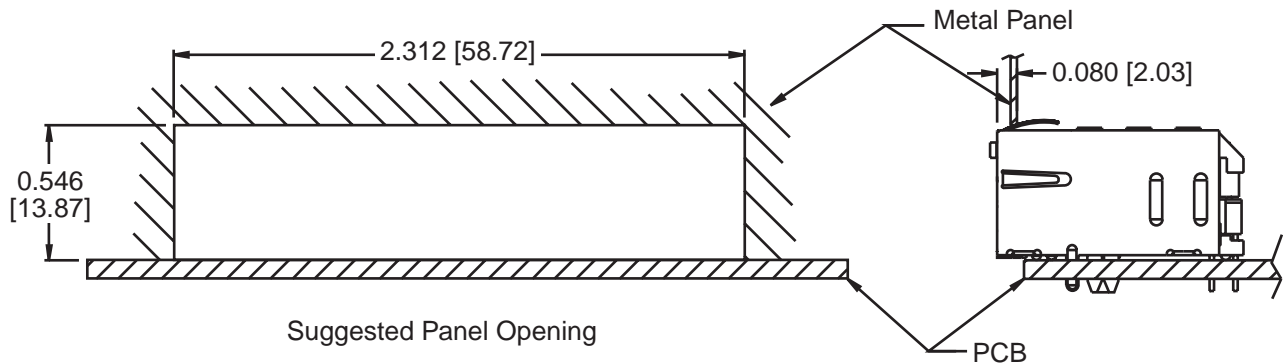
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### PAD LAYOUT

0810-1X4T-03  
0810-1X4T-04  
0810-1X4T-06



Suggested PCB Pad Layout  
Component Side View



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