

# INTEGRATED CONNECTOR MODULES

## 10/100Base-TX belMag™ with LEDs

BM00804

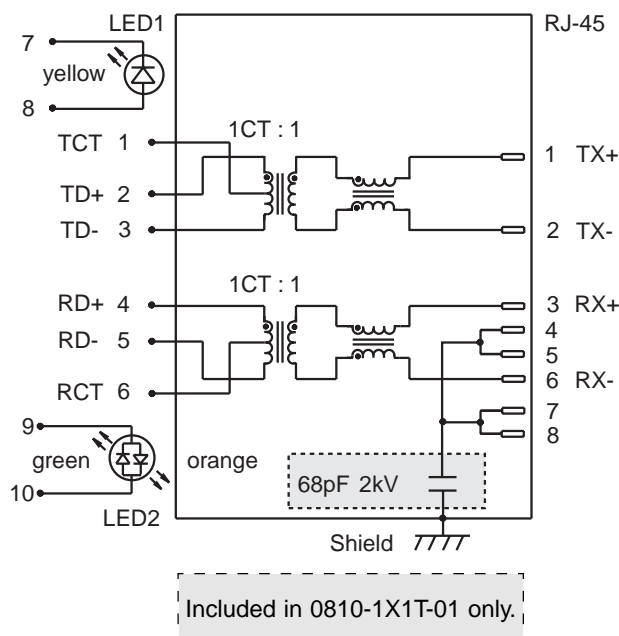
- Shielded connector with integrated 10/100 magnetics
- Compatible with a variety of 10/100 transceiver ICs
- Operating temperature 0° to +70° C
- Storage temperature -40° to +85° C
- Complies with IEEE standards and all 10/100 Ethernet specifications including 350µH with 8mA DC bias
- Integrated design 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

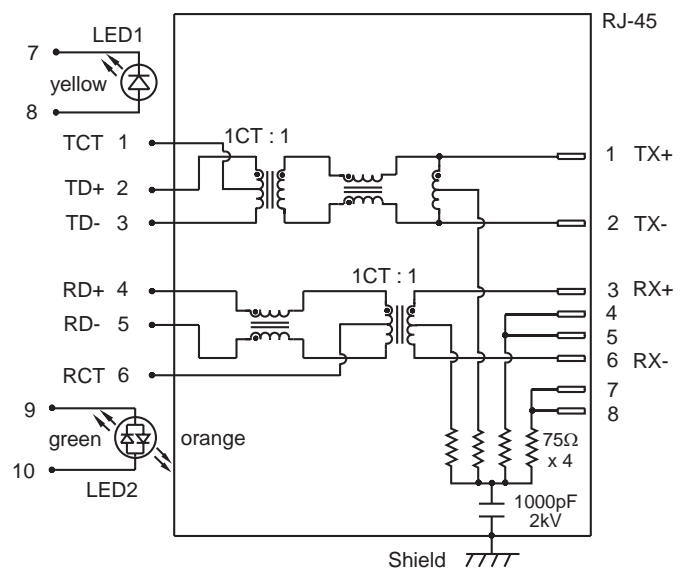
Part Number	Insertion Loss dB max	Return Loss dB min				Common to Differential Mode Rejection dB min	Common to Common Mode Rejection dB min	Crosstalk dB min			
		1MHz to 100MHz	1MHz to 30MHz	30MHz to 60MHz	60MHz to 80MHz			100kHz to 100MHz	1MHz	30MHz	60MHz
0810-1X1T-01	-1.0	-18	18 - 20 log (f/30MHz)	-12	40	30	-65	-45	-37	-35	
0810-1X1T-02	-1.0	-18	18 - 20 log (f/30MHz)	-12	40	30	-65	-45	-37	-35	
0810-1X1T-03	-1.0	-18	18 - 20 log (f/30MHz)	-12	40	30	-65	-45	-37	-35	

### SCHEMATICS

**0810-1X1T-01**  
**0810-1X1T-02**



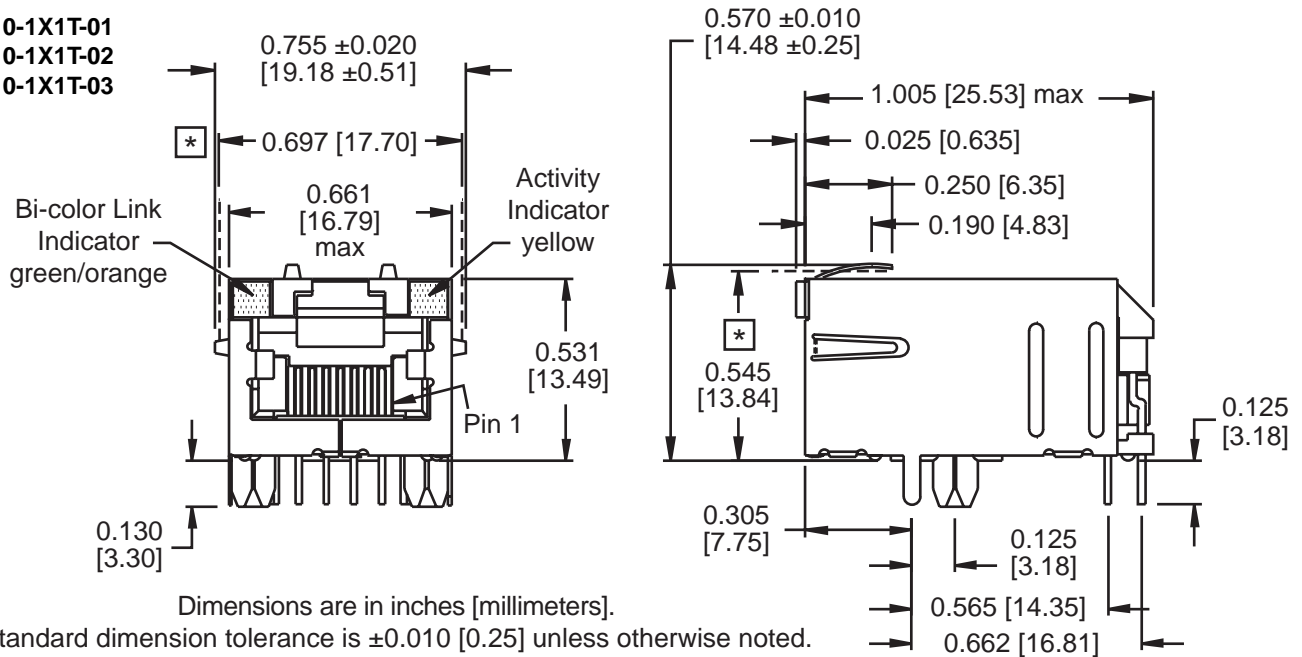
**0810-1X1T-03**



BM00804

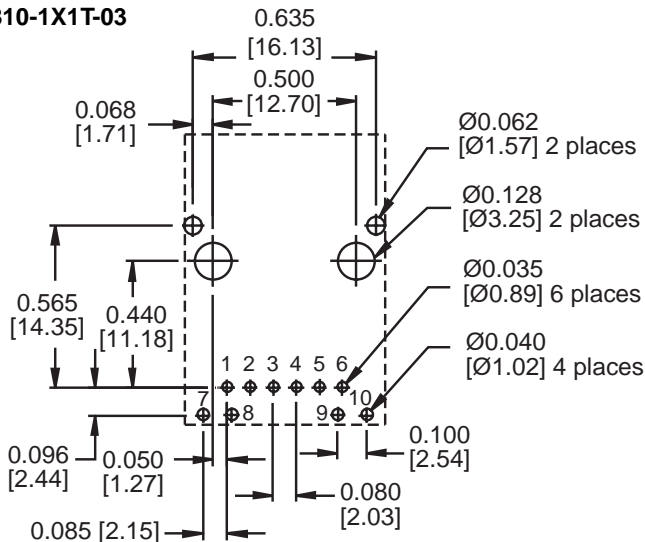
### MECHANICAL

0810-1X1T-01  
0810-1X1T-02  
0810-1X1T-03



### PAD LAYOUT

0810-1X1T-01  
0810-1X1T-02  
0810-1X1T-03



Suggested PCB Pad Layout  
Component Side View

### 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

### \*Max Allowable Compression of Fingers

Top:	Compress from 0.570 to 0.545
Side:	Compress from 0.755 to 0.697

### Available Options

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

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### CORPORATE

Bel Fuse Inc.  
206 Van Vorst Street  
Jersey City, NJ 07302  
Tel 201-432-0463  
Fax 201-432-9542  
www.belfuse.com

### FAR EAST

Bel Fuse Ltd.  
8F / 8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel 852-2328-5515  
Fax 852-2352-3706  
www.belfuse.com

### EUROPE

Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Suite G7, Preston  
Lancashire, PR1 8UD, U.K.  
Tel 44-1772-556601  
Fax 44-1772-888366  
www.belfuse.com