

# INTEGRATED CONNECTOR MODULES

## Gigabit belMag™ with LEDs

BM01810

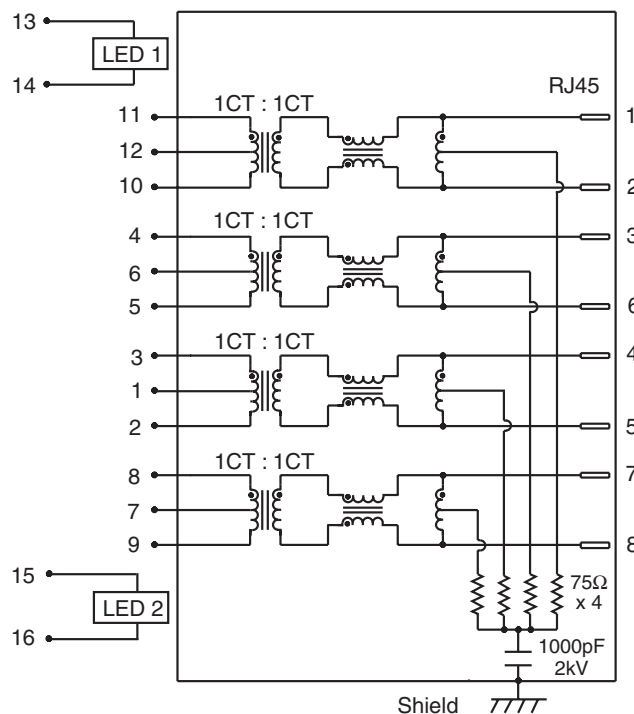
- Single port shielded RJ-45 connector with integrated Gigabit Ethernet magnetics
- Compatible with a variety of Gigabit Ethernet transceiver ICs and 10/100Base-TX transceiver ICs
- Operating temperature 0° to +70° C
- Storage temperature -40° to +85° C
- Complies with IEEE 802.3ab standards and all Gigabit Ethernet specifications
- Integrated design conserves valuable board space
- Minimum interwinding breakdown voltage of 1500 Vrms
- Adaptable, modular design provides higher reliability

### ELECTRICAL SPECIFICATIONS AT 25° C

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	Hipot Vrms min
0.1MHz to 100MHz	100MHz to 125MHz	0.5MHz to 40MHz	40MHz to 100MHz	100KHz to 100MHz	100KHz to 100MHz		
-0.8	-1.2	-18	-12 + 20 log (f/80 MHz)	-35	-30	-33 + 20 log (f/100MHz)	1500

### SCHEMATIC

0826-1A1T-23  
 0826-1B1T-23  
 0826-1C1T-23  
 0826-1D1T-23  
 0826-1E1T-23  
 0826-1G1T-23  
 0826-1K1T-23  
 0826-1L1T-23  
 0826-1X1T-23  
 0826-1Y1T-23



See chart on page 2 for LED colors and polarity.

### LED COLORS AND POLARITY

Part Number	LED 1				LED 2			
	Color	Polarity		Color	Polarity			
		Pin 13	Pin 14		Pin 15	Pin 16		
0826-1A1T-23	Yellow	-	+	Green	-	+		
0826-1B1T-23	Green	-	+	Bi-color	Green	-	+	
	Orange	+	-		Orange	+	-	
0826-1C1T-23	Green	-	+	Bi-color	Green	-	+	
	Yellow	+	-		Yellow	+	-	
0826-1D1T-23	Green	-	+	Yellow	-	+		
0826-1E1T-23	Green	-	+	Bi-color	Green	-	+	
					Orange	+	-	
0826-1G1T-23	Green	-	+	Green	-	+		
0826-1K1T-23	Green	-	+	Bi-color	Green	-	+	
					Yellow	+	-	
0826-1L1T-23	Bi-color	Green	-	+	Green	-	+	
		Yellow	+	-				
0826-1X1T-23	Yellow	-	+	Bi-color	Green	-	+	
					Orange	+	-	
0826-1Y1T-23	Yellow	-	+	Yellow	-	+		

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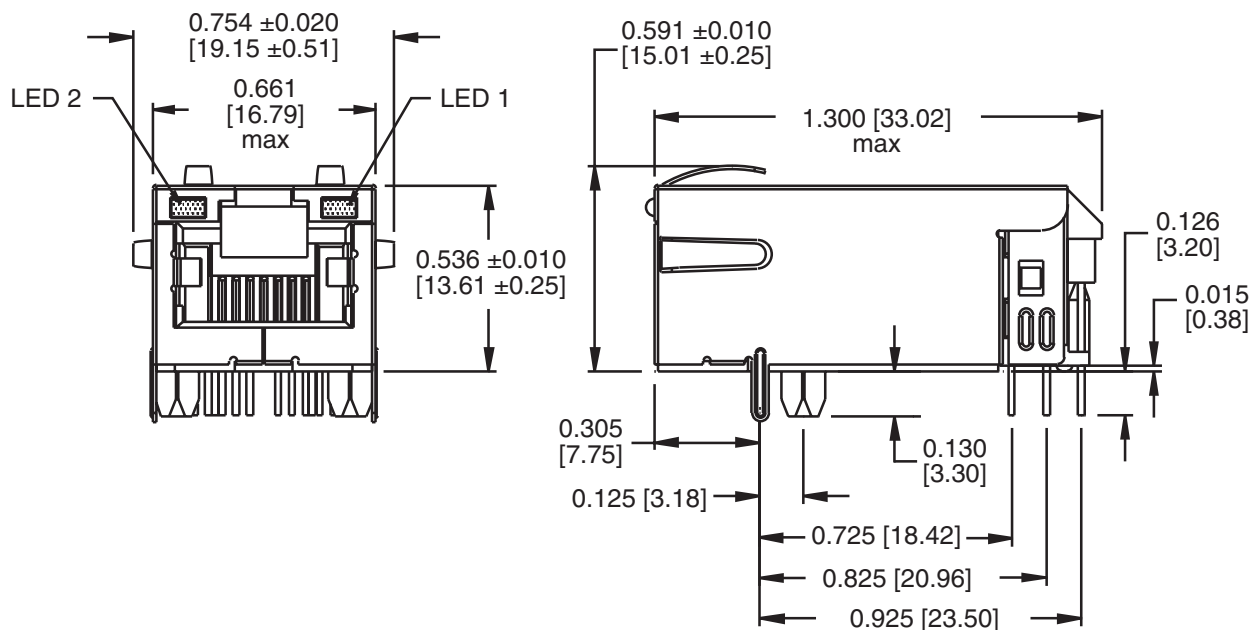
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### MECHANICAL

- 0826-1A1T-23
- 0826-1B1T-23
- 0826-1C1T-23
- 0826-1D1T-23
- 0826-1E1T-23
- 0826-1G1T-23
- 0826-1K1T-23
- 0826-1L1T-23
- 0826-1X1T-23
- 0826-1Y1T-23



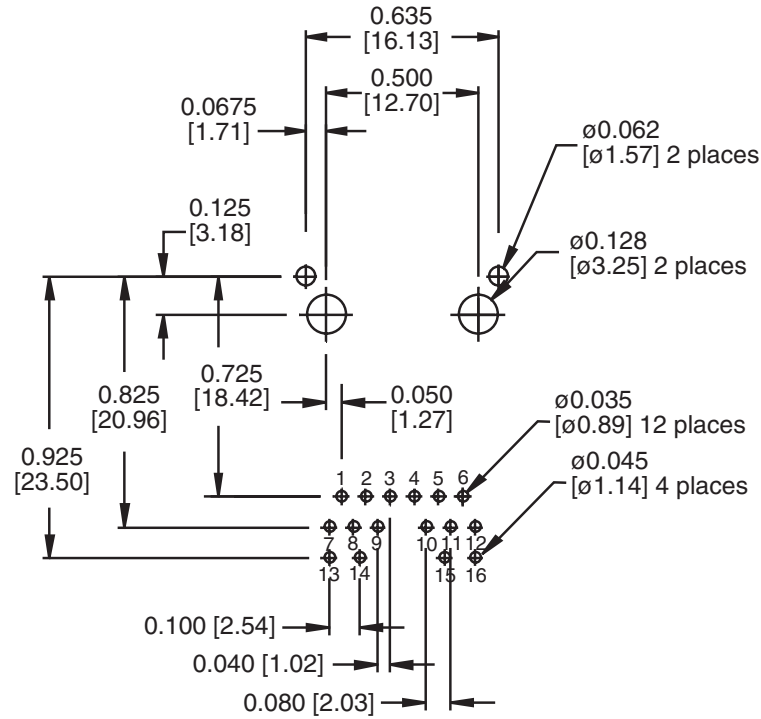
Dimensions are in inches [millimeters].  
Standard dimension tolerance is  $\pm 0.010$  [0.25] unless otherwise noted.

#### Notes

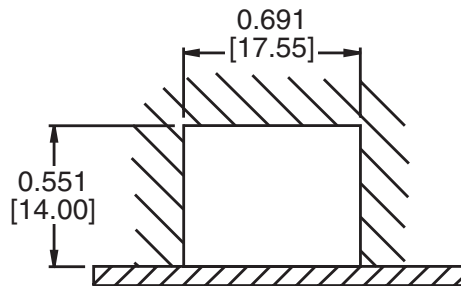
Plastic Housing	Thermoplastic, flammability rating UL 94V-0
Contacts	50 micro-inch hard gold plating
Pins	Tin-coated copper wire, DIA 0.018" [0.46]
Solderability	Per MIL Std. 202, Method 208
Metal Shield	Tin lead plated copper alloy

#### PAD LAYOUT

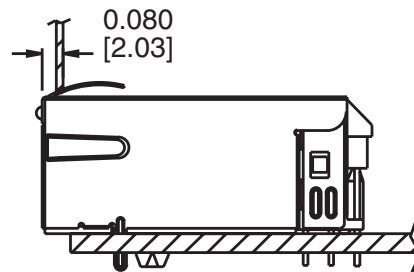
- 0826-1A1T-23
- 0826-1B1T-23
- 0826-1C1T-23
- 0826-1D1T-23
- 0826-1E1T-23
- 0826-1G1T-23
- 0826-1K1T-23
- 0826-1L1T-23
- 0826-1X1T-23
- 0826-1Y1T-23



Suggested PCB Pad Layout  
Component Side View



Suggested Panel Opening



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