



**THE DATASHEET OF**  
**S553-5999-D6-F**



# COMMON MODE CHOKES

## For LAN and Telecom Applications

CMC00100

- Designed to reduce EMI and common mode noise
- Common mode attenuation from 100kHz to 500MHz
- Operating temperature 0° to 70° C
- Multiple signal lines and packaging options available
- Low profile, SMT packaging rated to withstand 225° C peak IR reflow temperature
- Minimum interwinding breakdown voltage of 1500 Vrms

### ELECTRICAL SPECIFICATIONS AT 25° C

Part Number	Number of Lines (winding x core)	OCL μH min	Common Mode Attenuation dB typ								DCR Ω max
			300kHz	1MHz	10MHz	30MHz	50MHz	100MHz	300MHz	500MHz	
<b>Surface Mount</b>											
S555-5999-41	4 (4 x 1)	20	-16	-25	-37	-42	-41	-42	-34	-31	0.50
S555-5999-40	4 (4 x 1)	24	-10	-22	-30	-29	-27	-23	-10	-2	0.35
S555-5999-15	4 (2 x 2)	38	-10	-17	-29	-35	-36	-36	-23	-15	0.30
S555-0139-01	4 (2 x 2)	80	-11	-21	-30	-32	-33	-32	-20	-9	0.95
S555-5999-02	4 (2 x 2)	140	-17	-27	-40	-45	-43	-38	-22	-11	0.80
S555-6400-08	4 (4 x 1)	4700	-40	-50	-38	-28	-22	-11	-4	---	1.00
S555-2940-00	6 (2 x 3)	80	-12	-19	-29	-30	-29	-28	-20	-12	0.20
S555-1084-00	8 (2 x 4)	24	-5	-12	-27	-32	-34	-32	-20	-11	0.30
S555-5999-39	8 (2 x 4)	350	-21	-28	-35	-29	-25	-19	-10	-4	0.20
S553-5999-D6	16 (2 x 8)	85	-17	-27	-37	-38	-36	-30	-12	-2	0.30
<b>Through Hole</b>											
0553-3965-08	2 (2 x 1)	140	-16	-26	-38	-43	-45	-42	-24	-16	0.80
0555-3001-08	4 (2 x 2)	120	-16	-26	-39	-45	-44	-38	-20	-15	0.80
0555-6400-06	4 (4 x 1)	4700	-44	-50	-37	-27	-21	-8	---	---	1.00

©2003 Bel Fuse Inc. Specifications subject to change without notice. 03.03

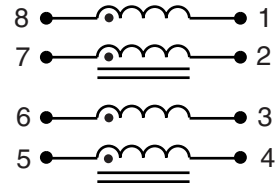
## COMMON MODE CHOKES For LAN and Telecom Applications

### SCHEMATICS

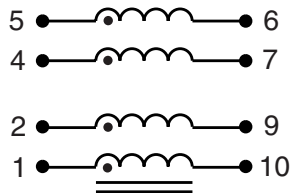
0553-3965-08



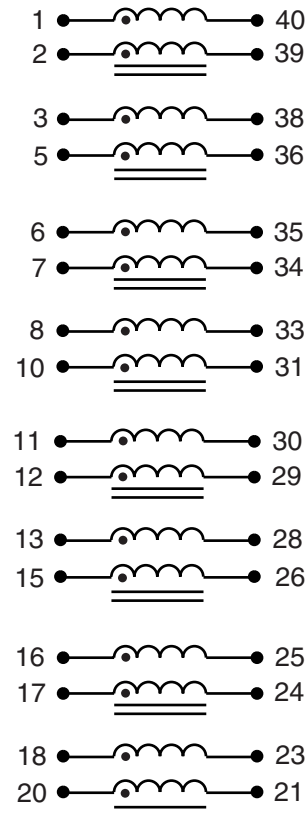
0555-3001-08



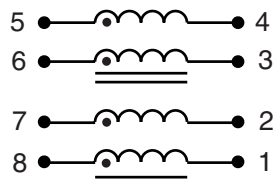
0555-6400-06



S553-5999-D6



S555-0139-01

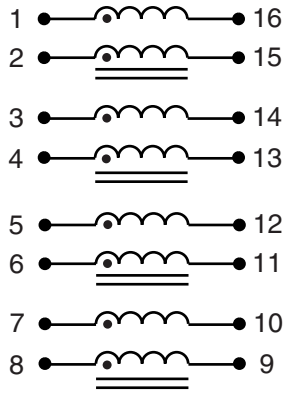


# COMMON MODE CHOKES

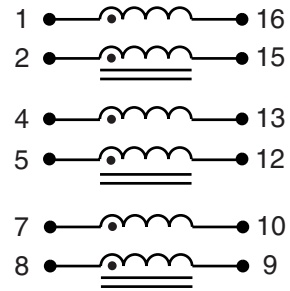
For LAN and Telecom Applications

**SCHEMATICS**

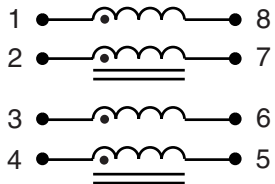
**S555-1084-00**  
**S555-5999-39**



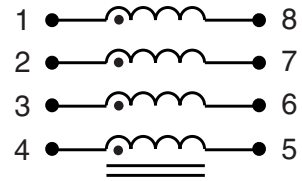
**S555-2940-00**



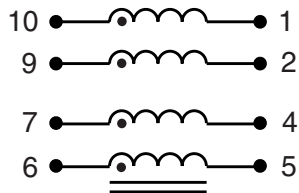
**S555-5999-02**  
**S555-5999-15**



**S555-5999-40**  
**S555-5999-41**



**S555-6400-08**

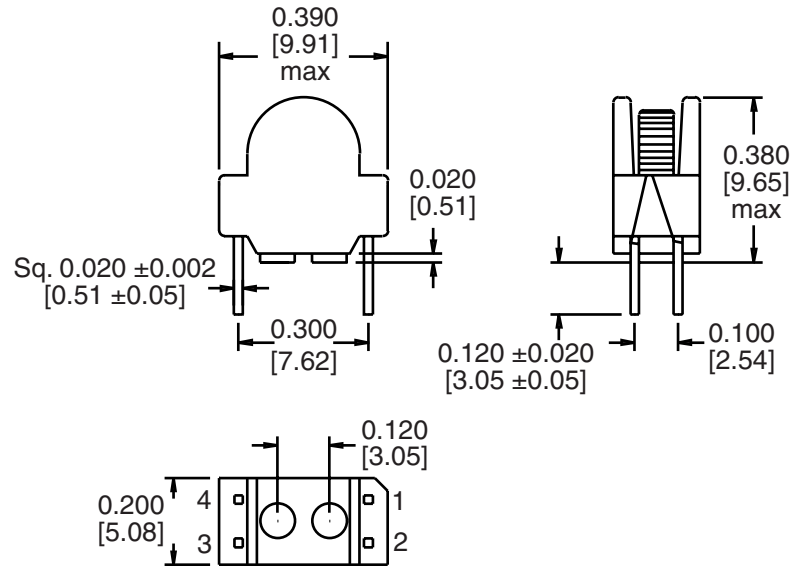


## COMMON MODE CHOKES For LAN and Telecom Applications

CMC00100

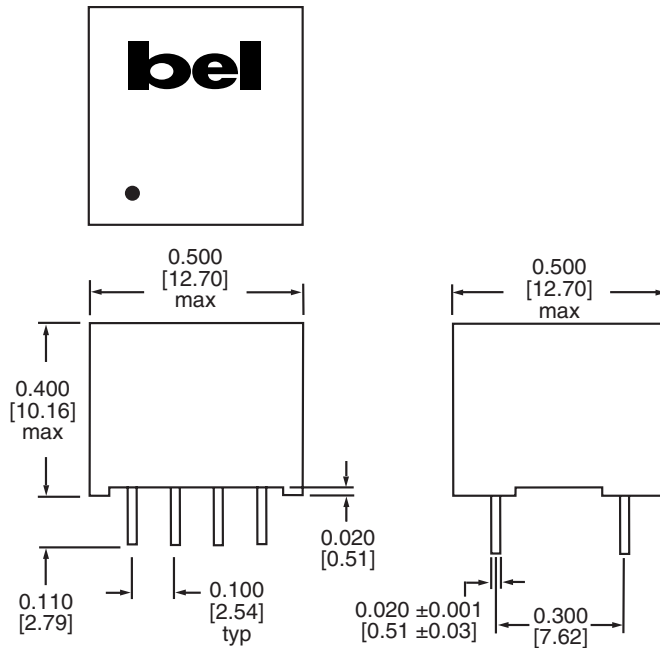
### MECHANICALS

0553-3965-08



Dimensions are in inches [millimeters].  
Standard dimension tolerance is ±0.005 [0.13] unless otherwise noted.

0555-3001-08



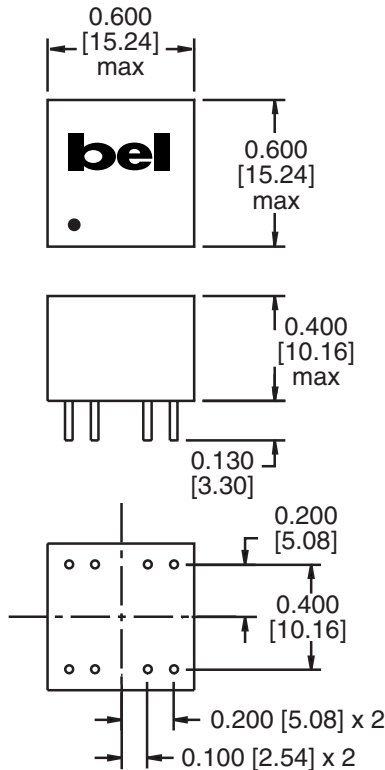
Dimensions are in inches [millimeters].  
Standard dimension tolerance is ±0.005 [0.13] unless otherwise noted.

# COMMON MODE CHOKES

For LAN and Telecom Applications

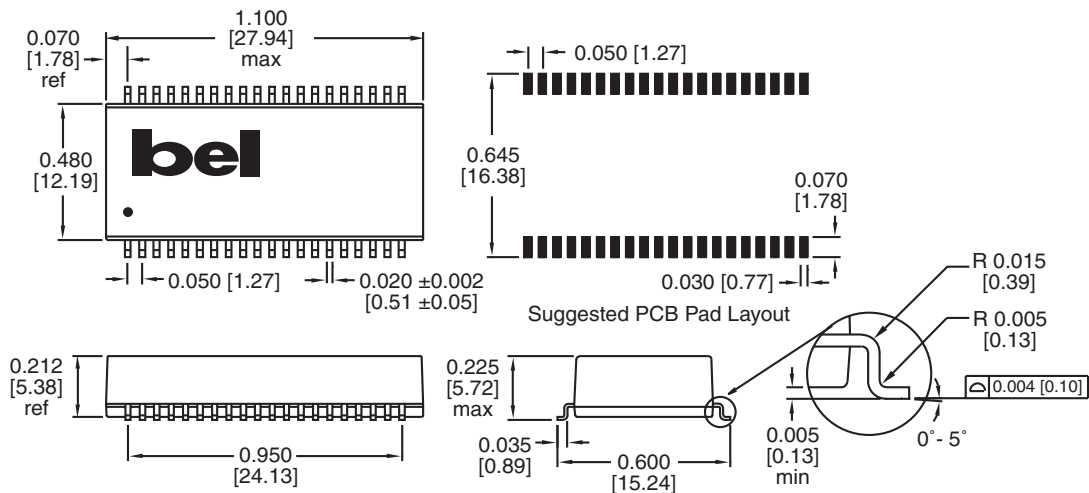
## MECHANICALS

0555-6400-06



Dimensions are in inches [millimeters].  
Standard dimension tolerance is  $\pm 0.005$  [0.13] unless otherwise noted.

S553-5999-D6

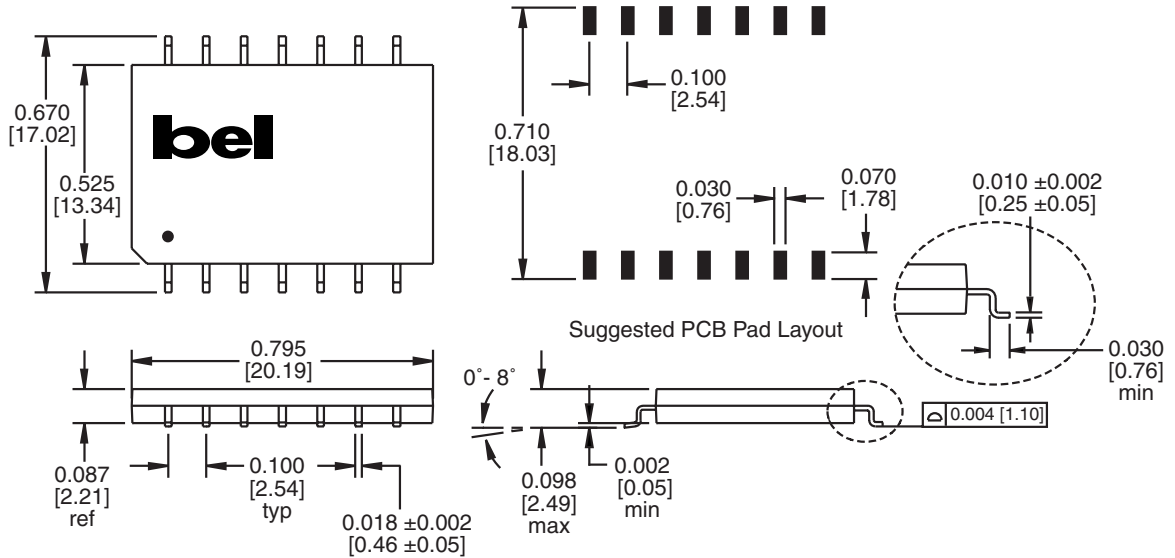


Dimensions are in inches [millimeters].  
Standard dimension tolerance is  $\pm 0.005$  [0.13] unless otherwise noted.

CMC00100

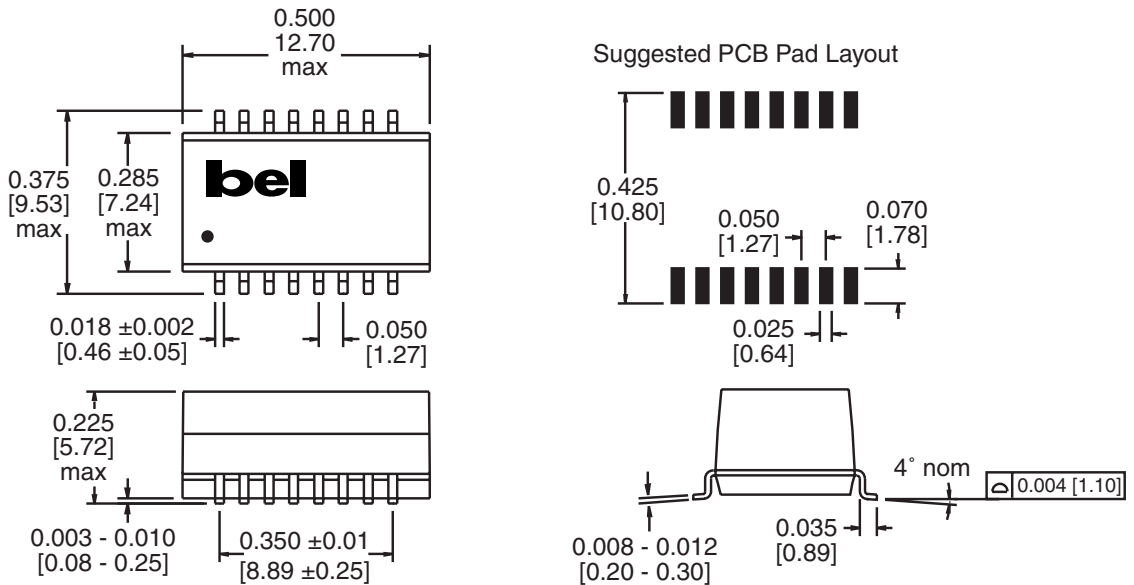
### MECHANICALS

S555-0139-01



Dimensions are in inches [millimeters].  
Standard dimension tolerance is  $\pm 0.005$  [0.13] unless otherwise noted.

S555-1084-00  
S555-2940-00  
S555-5999-39



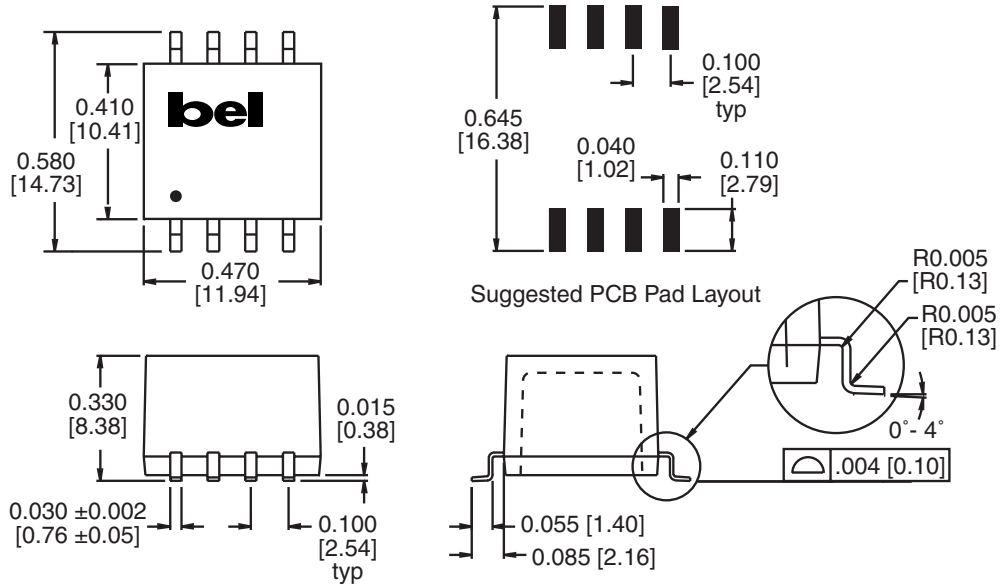
Dimensions are in inches [millimeters].  
Standard dimension tolerance is  $\pm 0.005$  [0.13] unless otherwise noted.

# COMMON MODE CHOKES

For LAN and Telecom Applications

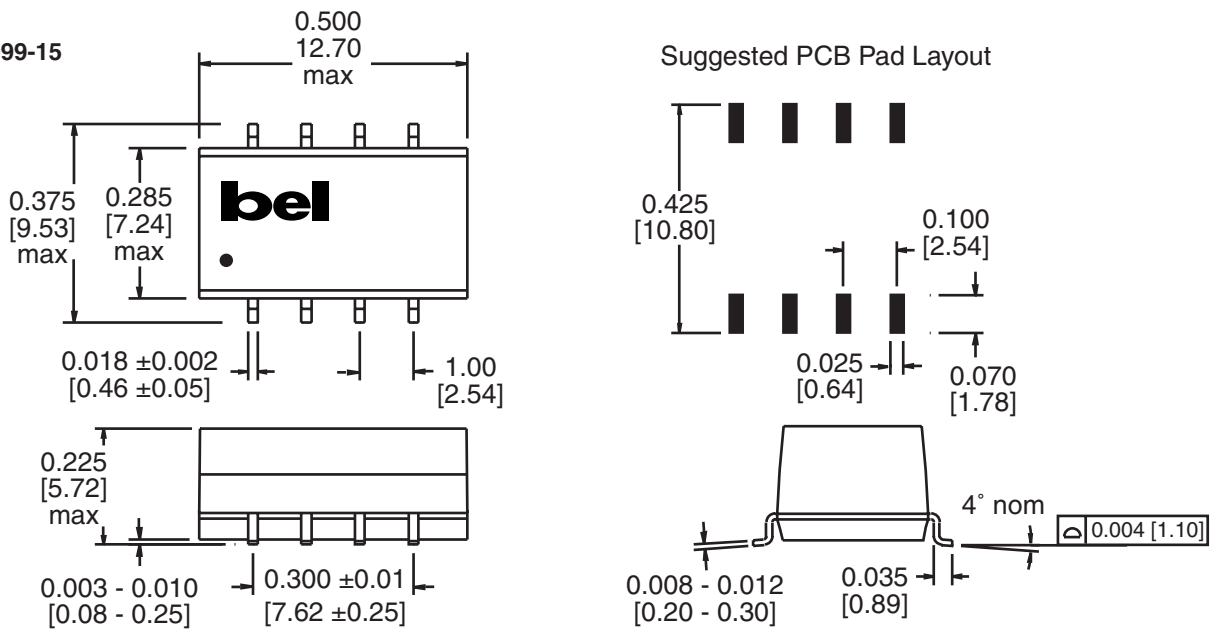
## MECHANICALS

S555-5999-02



Dimensions are in inches [millimeters].  
Standard dimension tolerance is ±0.005 [0.13] unless otherwise noted.

S555-5999-15

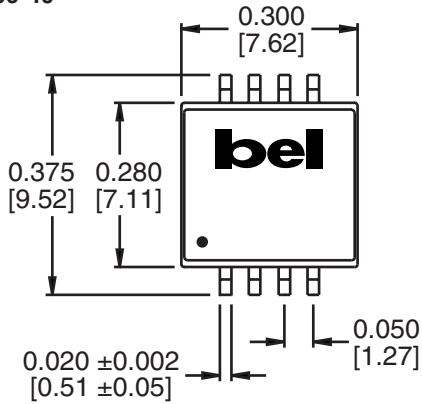


Dimensions are in inches [millimeters].  
Standard dimension tolerance is ±0.005 [0.13] unless otherwise noted.

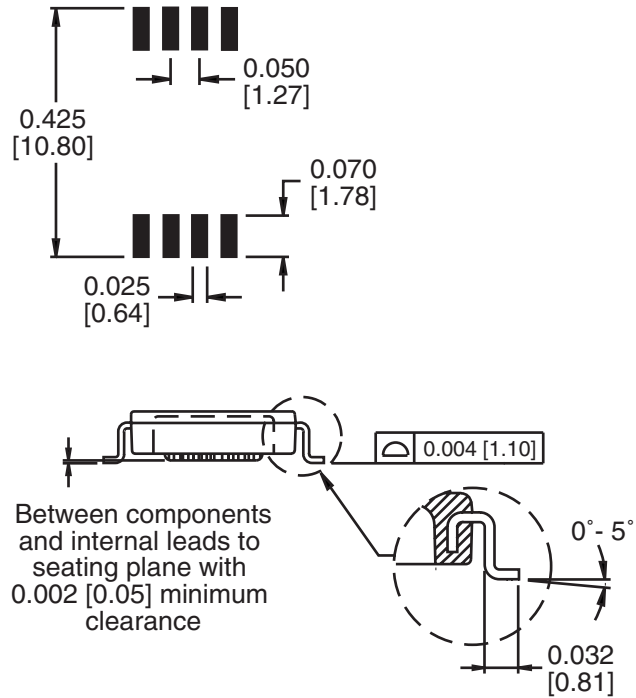
CMC00100

### MECHANICALS

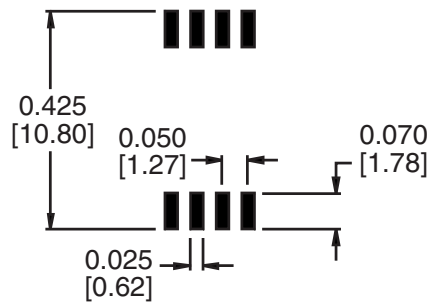
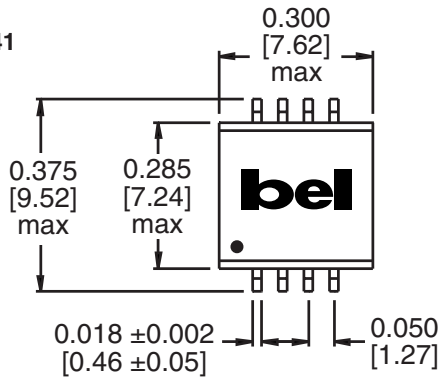
S555-5999-40



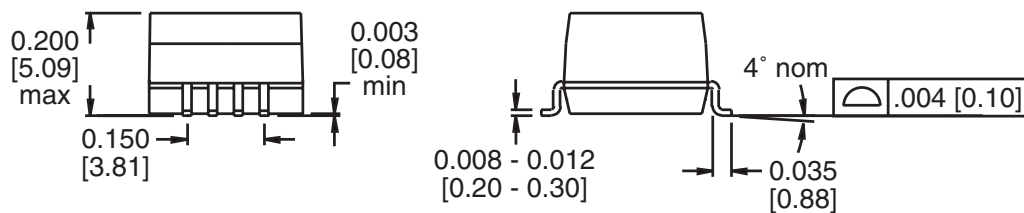
Suggested PCB Pad Layout



S555-5999-41



Suggested PCB Pad Layout

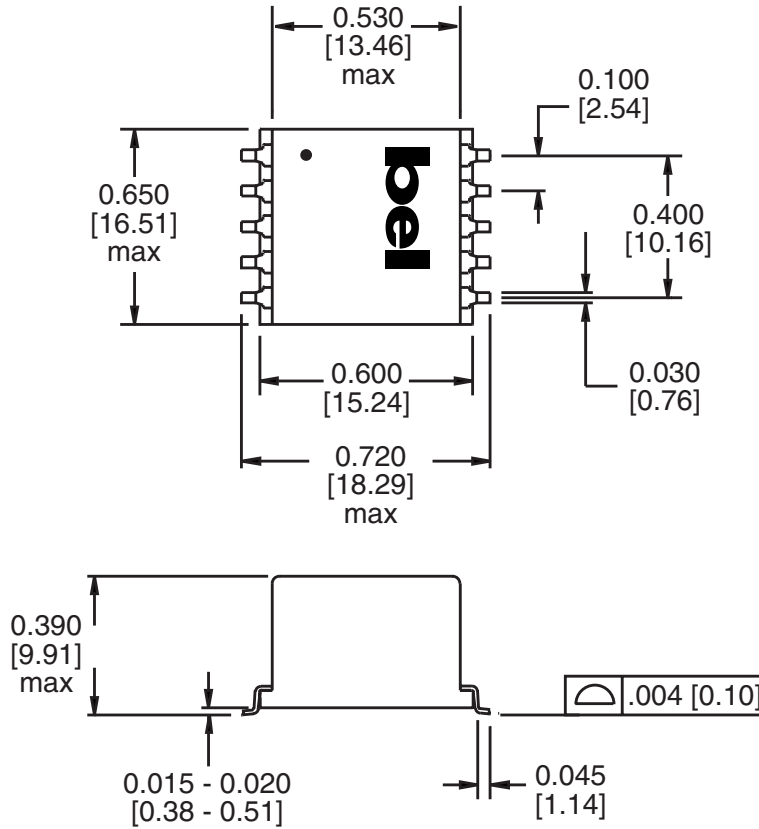


Dimensions are in inches [millimeters].  
 Standard dimension tolerance is ±0.005 [0.13] unless otherwise noted.

**COMMON MODE CHOKES**  
**For LAN and Telecom Applications**

**MECHANICALS**

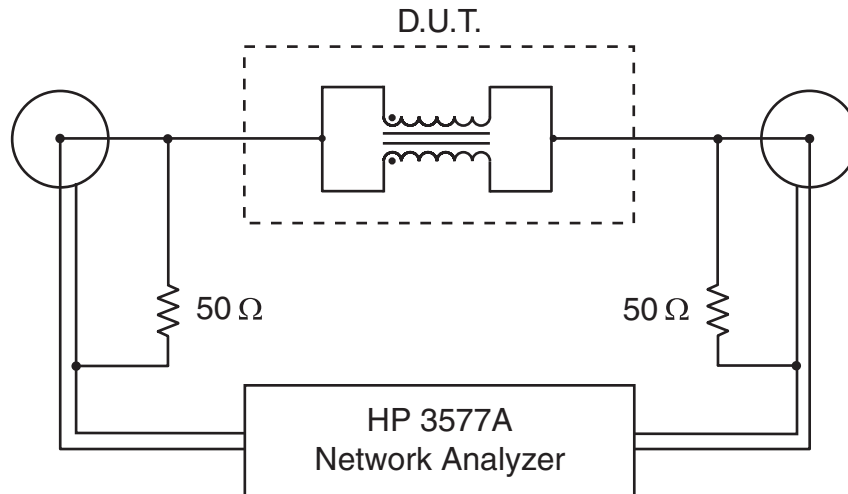
S555-6400-08



Dimensions are in inches [millimeters].  
 Standard dimension tolerance is  $\pm 0.005$  [0.13] unless otherwise noted.

## COMMON MODE CHOKES For LAN and Telecom Applications

### COMMON MODE TEST CIRCUIT



#### CORPORATE

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

CMC-10

#### 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

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

[⊖ View S553-5999-D6-F on WIN SOURCE](#)

[⊖ Bel Fuse Inc. Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

- ✓ Global Sourcing Solution
- ✓ Obsolete Management
- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management