

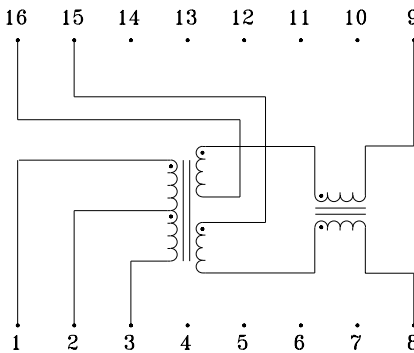
# TOKENRING NETWORKING COMPONENTS

- Designed for use with token ring transceivers developed by Texas Instruments
- Integrated transformer and common mode choke
- Compliant with IEEE 802.5 standards
- Single channel transmit or receive version of S553-5999-40
- Robust surface mount packaging rated to meet 225°C peak IR reflow temperature
- For use in either 100 ohm UTP or 150 ohm STP media systems

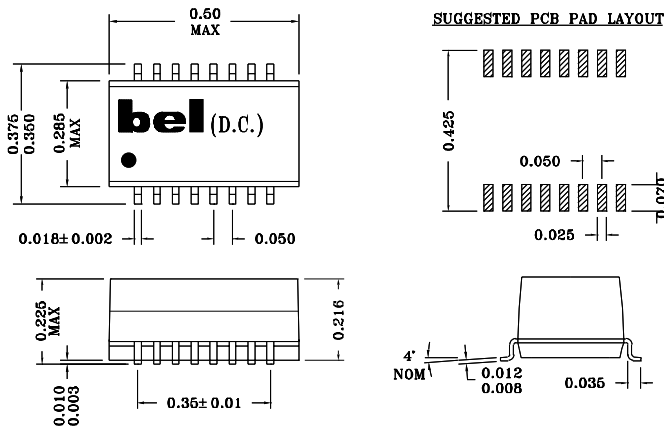
## ELECTRICALS AT 25°C

Part No.	Turns Ratio	Return Loss (dB) Min		Insertion Loss (dB) Max				Common to Common Mode Rej (dB) Min		
		1-17MHz	17-25MHz	4MHz	8MHz	16MHz	24MHz	5MHz	20MHz	200MHz
S553-5999-41	1CT:1CT	-16	-9	-0.5	-0.8	-1.1	-1.9	-35	-35	-20

## SCHEMATIC



## MECHANICAL

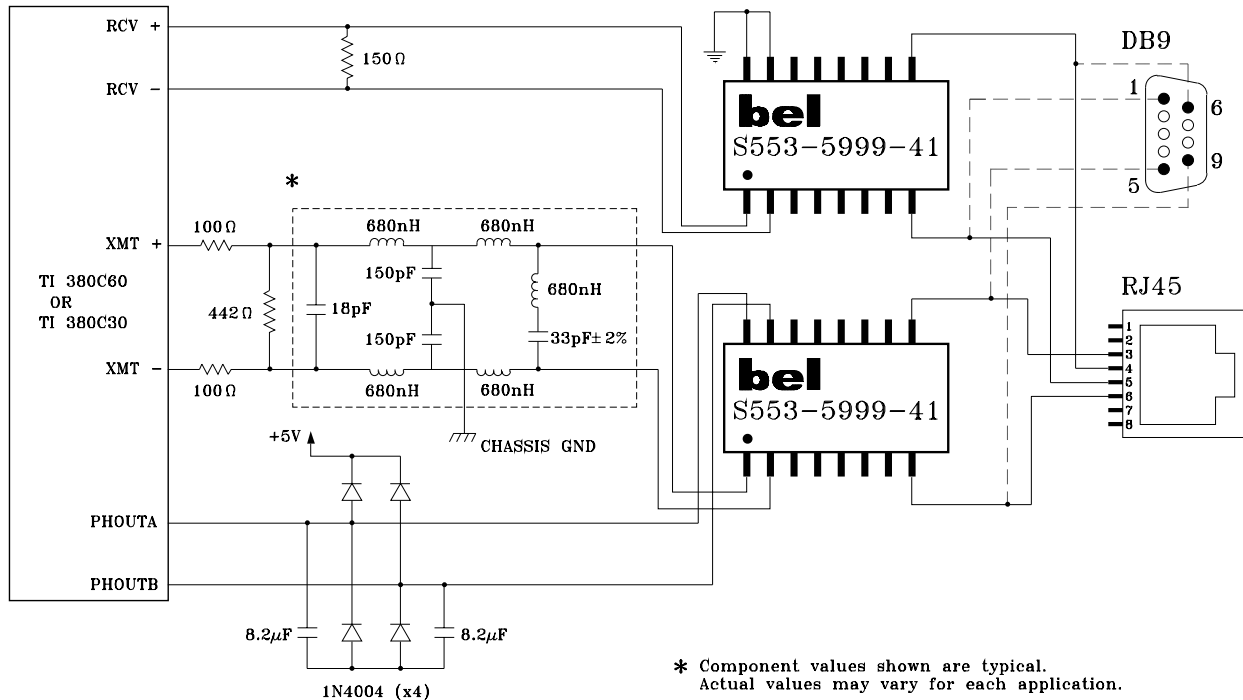


Specifications subject to change without notice.

## TOKENRING NETWORKING COMPONENTS

960044B

### APPLICATION CIRCUIT



### APPLICATION NOTES

- Bel has created this product for use with token ring 4/16 Mbps transceivers developed by Texas Instruments and Madge. The impedance of this part has been optimized for use in either 100 ohm UTP or 150 ohm STP media applications. The Bel module provides isolation and impedance matching transformers plus common mode choke for either a transmit or receive channel. External filtering is required.
- Suppression of board induced noise can be achieved with precision layout instructions, along with careful consideration of the selection and placement of discrete components for the interface circuit.
- Bel's low profile, surface mount packaging is ideal for high speed pick and place machinery. Parts can be shipped on tape and reel for high speed placement. Construction processes have been implemented for thermal compatibility with high temperature IR reflow assembly processing. Post dipping of leads assist with PC board solderability. Each part is optically inspected to meet rigid coplanarity requirements.
- OCL (inductance) of this transformer is 616  $\mu$ H minimum. Optional lower inductance values can be made available.

#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: [BelFuse@belfuse.com](mailto:BelFuse@belfuse.com)  
Internet: <http://www.belfuse.com>

#### Far East Office

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

#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366