# TOKEN RING NETWORKING COMPONENTS



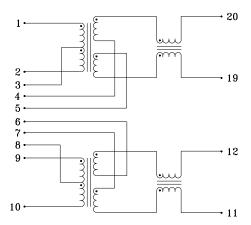
960043A

- Designed for use with token ring transceivers developed by Texas Instruments and Madge
- Complete single port device, including transmit and receive channels in one package
- Integrated transformers and common mode chokes
- Compliant with IEEE 802.5 standards
- 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

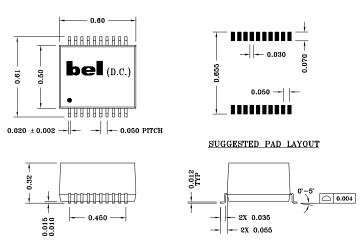
# ELECTRICALS AT 25°C (each channel)

	Turns	Return Loss Turns (dB) Min		Insertion Loss (dB) Max				Common to Common Mode Rej (dB) Min				Crosstalk (dB) Min		
Part No.	Ratio	1-17MHz	17-25MHz	4MHz	8MHz	16MHz	24MHz	5MHz	20MHz	200MHz	8MHz	16MHz	24MHz	
S553-5999-40	1CT:1CT	-16	-9	-0.5	-0.8	-1.1	-1.9	-35	-35	-20	-55	-50	-45	

## **SCHEMATIC**



## **MECHANICAL**



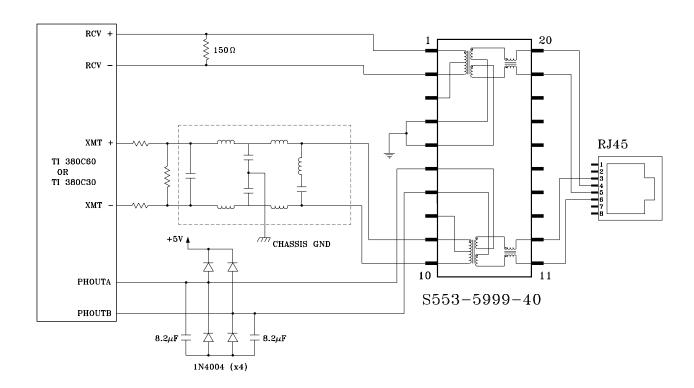
Specifications subject to change without notice.



# TOKEN RING NETWORKING **COMPONENTS**

#### 960043A

#### 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 with only one RJ-45 connection. The Bel module provides isolation and impedance matching transformers plus common mode choke for both transmit and receive channels. 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 each transformer is 616 µH minimum. Optional lower inductance models can be made available.

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