# bel

# **10BASE-TNETWORK COMPONENTS**

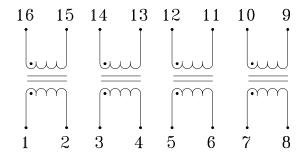
960013B

- Designed for use with multi-port 10Base-T transceivers which incorporate digital filters in the silicon and require 1:1 Tx and Rx transformer ratios, such as the AMD IMR series
- Robust miniature SMT packaging, rated to 225°C peak IR reflow temperature
- Low cost, dual, 2-port design solution
- Separate common mode chokes or integrated common mode choke designs available

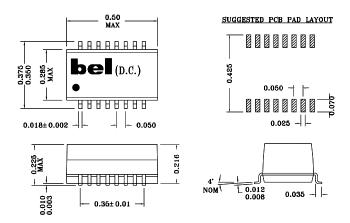
## **ELECTRICALS AT 25°C**

Part No.	Turns Ratio	Insertion Loss (dB) Max 1-10MHz	OCL (Inductance) µH Min	Return Loss (dB) Min 5MHz-10MHz	Crosstalk (dB) Min 5MHz-10MHz	Hipot (Vrms) Min
S553-3873-19	1:1	-1.0	100	-16	-45	2000

### **SCHEMATIC**



## **MECHANICAL**



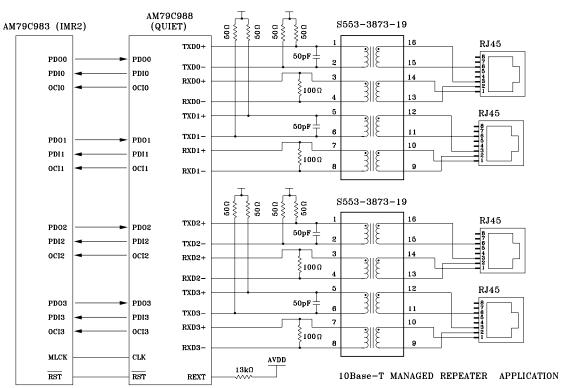
Specifications subject to change without notice.



#### 960013B

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## **APPLICATION CIRCUIT**



Please refer to the AMD 79C988 Application Note for schematic details.

#### APPLICATION NOTES

- Bel has designed this part primarily for use with AMD elMR (79C984A), elMR+ (79C985) and IMR2 (79C988) multi-port PHY transceivers, which include digital filtering within the silicon. All parts contain high voltage isolation transformers and meet the requirements of IEEE 802.3 standards. Common mode chokes are not inclusive to the design of these parts and may not be necessary if good layout and proper grounding techniques are implemented. If information of recommendations for PCB layouts is needed, please contact Bel engineering. Separately packaged common mode chokes are available on data sheet 960046.
- 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.
- Please refer to the Bel short form catalog for all of the recommended mating semiconductors that can be used with this part type.

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