# bel

### **HIGH SPEED LAN MAGNETICS**

960019B

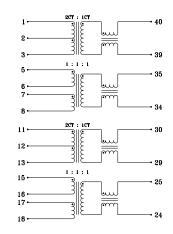
- Designed for use with Microlinear ML6692/6694/6698 PHY transceivers in either 10/100 Mbps or 100 Mbps applications
- Dual, 2-port designs offer highest degree of performance, board space and cost efficiency
- 40 pin low profile, surface mount packaging, rated to 225°C peak IR reflow temperature
- 2000 Vrms isolation

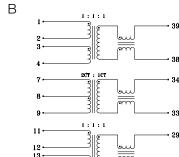
#### **ELECTRICALS AT 25°C**

Part No.	Insertion Loss (dB) Typ 1MHz-100MHz	Return Loss (dB) Min 1MHz-30MHz	Return Loss (dB) Min 30MHz-60MHz	Return Loss (dB) Min 60MHz-80MHz	Crosstalk (dB) Min 1MHz-100MHz	Mode Re	n to Diff j (dB) Min 100MHz		o Common j (dB) Min 100MHz	Schematic
S558-5999-92	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-50	-40	Α
S558-5999-93	-1.0	-16	16-20log(f/30MHz)	-10	-35	-50	-40	-50	-40	В

#### **SCHEMATICS**



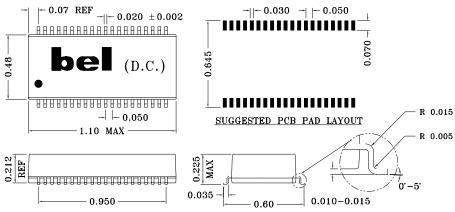




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#### **MECHANICAL**



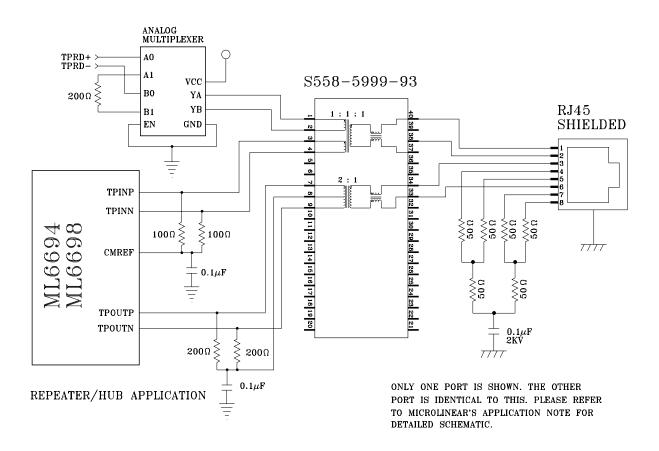
Specifications subject to change without notice.



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#### **HIGHSPEEDLAN MAGNETICS**

#### APPLICATION CIRCUIT



#### APPLICATION NOTES

- These Bel part types have been designed for use in 100 Mbps or 10/100 Mbps data transmission systems over category 5 UTP/STP cable. Each Bel part type provides superior EMI noise suppression, high voltage isolation, wave shaping and fast, but controlled rise times. All parts meet IEEE 802.3 standards, which includes 350µH OCL (inductance) when 8mA of DC bias is applied.
- These part types are recommended for use with Microlinear ML6692/6694/6698 PHY transceivers. These Bel dual, 2port solutions provide a cost effective design solution for multi-port repeater and switch applications with no performance degradation versus similar single port solutions.
- 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.

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