# HIGH SPEED LAN MAGNETICS 100BASE-T4MODULE



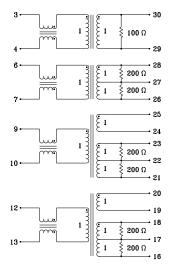
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- Designed for Broadcom's BCM5100 100Base-T4 PHY transceiver
- Complies with IEEE 802.3u standards, 100 Mbps over category 3, 4 or 5 UTP cable
- Robust surface mount packaging, rated for 225°C peak IR reflow temperature
- Internal termination resistors

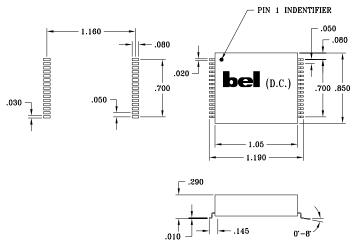
### **ELECTRICALS AT 25°C**

Part No.	Insertion Loss (dB) Max 2MHz-12.5MHz	Return Loss (dB) Min 2MHz-12.5MHz	Crosstalk (dB) Min 2MHz-12.5MHz	Common to Common Mode Rej (dB) Min			Hipot
				1-30MHz	60MHz	100MHz	(Vrms)
S558-5999-94	-1.0	-18	-35	-30	-30	-20	1500

### **SCHEMATIC**



### **MECHANICAL**



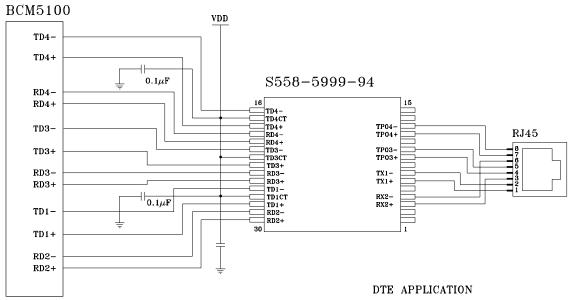
Specifications subject to change without notice.



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### **APPLICATION CIRCUIT**



NOTE: Please consult Broadcom for detail circuit schematic

#### **APPLICATION NOTES**

- The S558-5999-94 has been designed for use with Broadcom's BCM5100, 100Base-T4 chipset in category 3, 4 or 5 UTP/STP cable system applications, and can be used for either adapter cards or multi-port repeaters. The design of the S558-5999-94 provides each wired connection with high voltage isolation, wave shaping, fast but controlled rise times, EMI and common mode noise suppression.
- 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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