

HIGH SPEED LAN MAGNETICS

- Tested and qualified for use with Microlinear's ML 6692/6694/6698 10/100 Mbps PHY transceivers
- Low profile, surface mount packaging, rated for 225°C peak IR reflow temperature
- 350µH OCL (inductance) with 8mA DC bias applied
- Multiple pinout configurations available
- 10/100 Mbps or 100 Mbps only applications

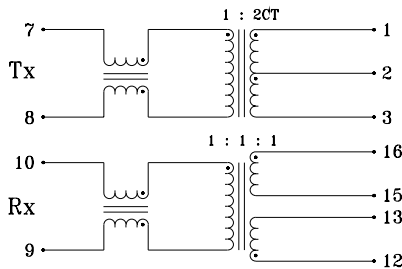
ELECTRICALS AT 25°C

Part No.	Insertion Loss (dB) Typ	Return Loss (dB) Min	Return Loss (dB) Min	Return Loss (dB) Min	Crosstalk (dB) Min	Common to Diff Mode Rej (dB) Min		Common to Common Mode Rej (dB) Min		Hipot (Vrms) Min
	1MHz-100MHz	1MHz-30MHz	30MHz-60MHz	60MHz-80MHz	1MHz-100MHz	30MHz	100MHz	30MHz	100MHz	
S558-1287-00	-1.0	-16	16-20log(f/30MHz)	-10	-40	-50	-40	-50	-40	2000
S558-1287-01	-1.0	-16	16-20log(f/30MHz)	-10	-40	-50	-40	-50	-40	2000
S558-1287-02	-1.0	-16	16-20log(f/30MHz)	-10	-40	-50	-40	-50	-40	2000
S558-1287-03	-1.0	-16	16-20log(f/30MHz)	-10	-40	-50	-40	-50	-40	2000
S558-5999-64	-1.0	-16	16-20log(f/30MHz)	-10	-40	-50	-40	-50	-40	2000
S558-5999-82	-1.0	-16	16-20log(f/30MHz)	-10	-40	-50	-40	-50	-40	2000

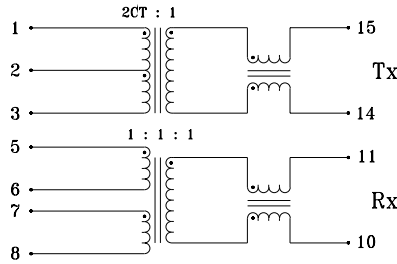
SCHEMATICS

S558-1287-00

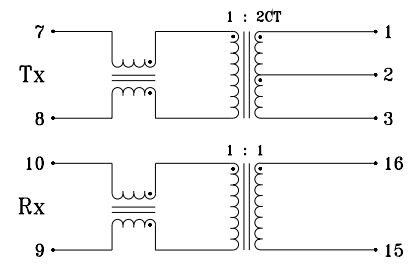
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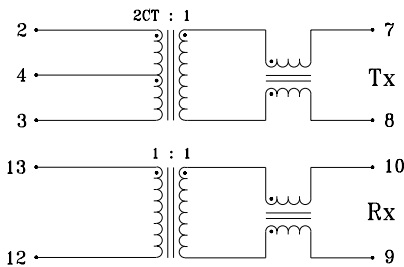
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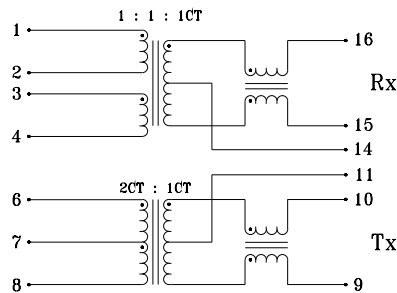
S558-1287-03



S558-5999-64



S558-5999-82



Specifications subject to change without notice.



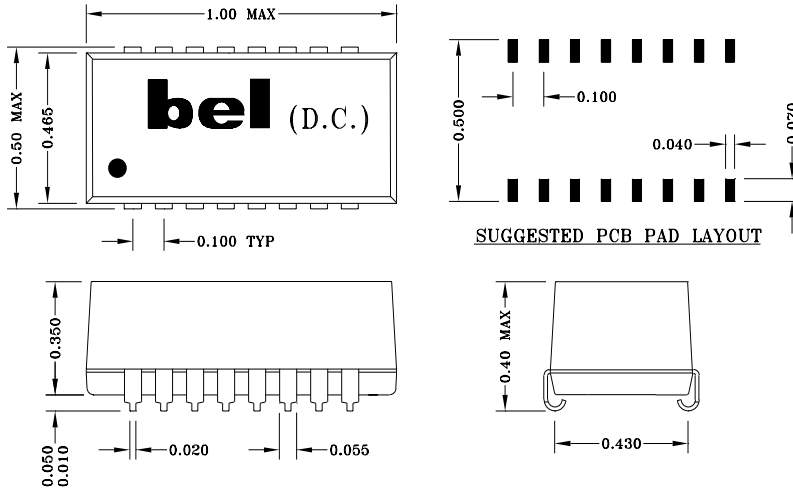
defining a degree of excellence

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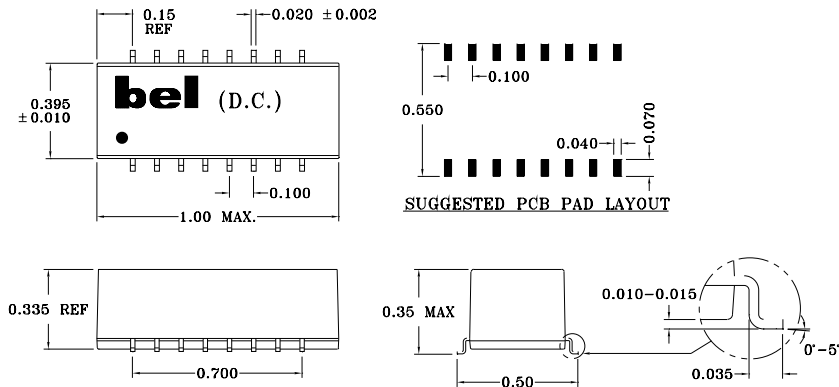
960007A

MECHANICALS

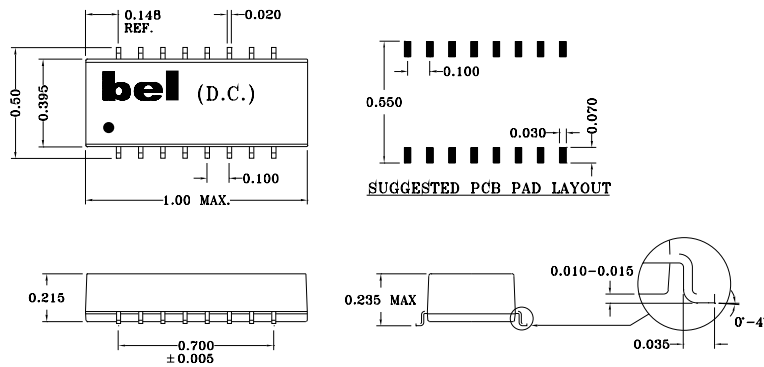
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S558-1287-01
S558-1287-02
S558-1287-03
S558-5999-64



S558-5999-82

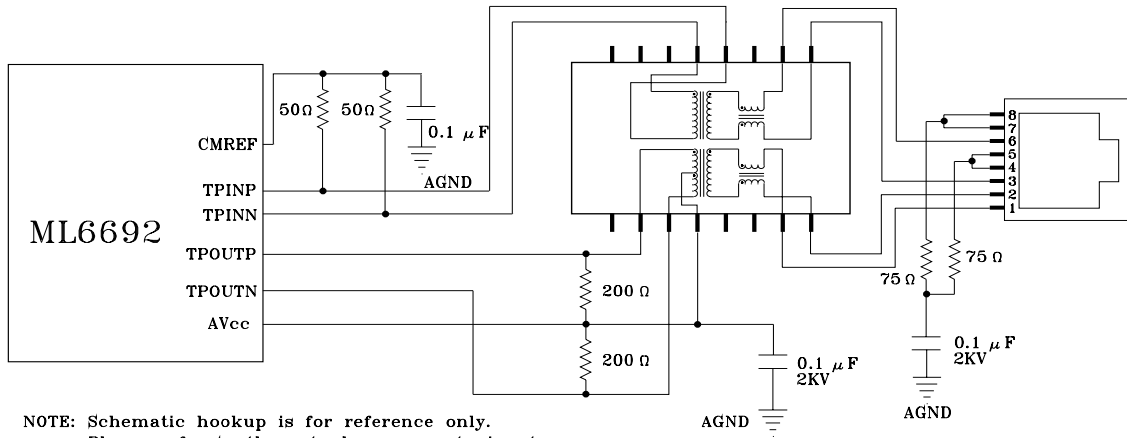


Specifications subject to change without notice.

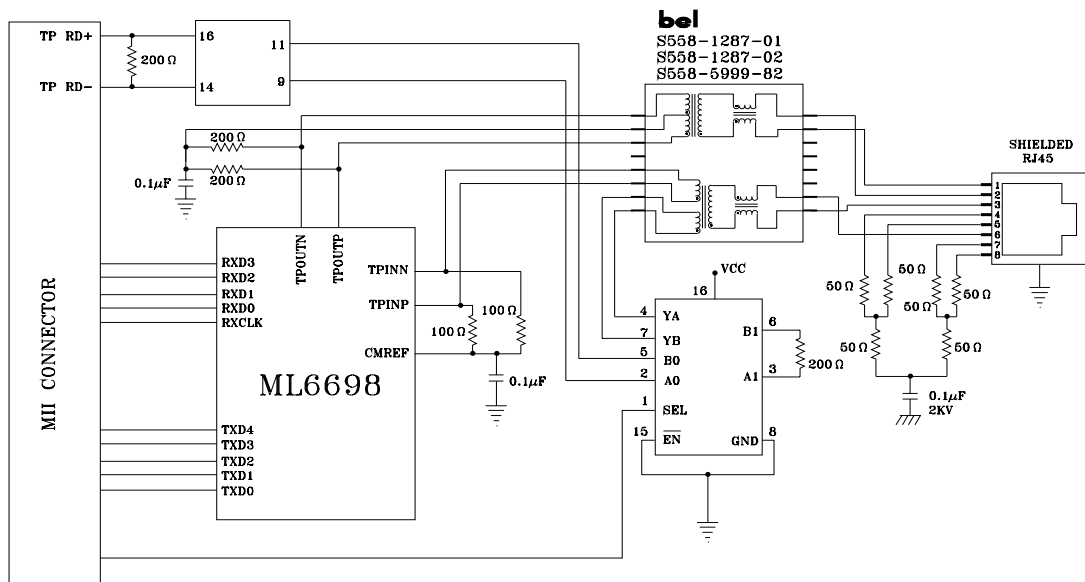
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APPLICATION CIRCUITS

BEL S558-5999-03
S558-5999-64



NOTE: Schematic hookup is for reference only.
Please refer to the actual component pinout



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Please refer to the actual component pinout

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960007A

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 DC bias is applied.
- These Bel part types have been tested and qualified for use with the Microlinear ML6692/6694/6698 chipsets in adapter card, and multi-port repeater or switch applications. Bel also provides dual, 2-port and quad, 4-port designs specifically for multi-port applications to provide cost and board space efficiency with no performance degradation. Please refer to Bel data sheets 960019 and 960035.
- The S558-1287-03 has been specifically designed for 100 Mbps only applications.
- For 10/100 Mbps applications, Microlinear suggests the following table be used as a guideline:

MAC	Microlinear	MII	SYM	Internal 10 BT	Internal 10 BT Filters	7-Wire
DEC21140	6692, 2653	✓	✓			✓
DEC21142	6692	✓		✓		
DEC21143	6698	✓	✓	✓		
AM79C971	6692	✓		✓		✓
I82557	6692, 2653	✓				✓*
MC91C100	6692, 2653	✓				✓
MX98713	6698	✓	✓	✓	✓	
TNETE100	6692	✓		✓	✓	

*I82557 muxes the MII and the 7-wire signals.

- 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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