

# HIGH SPEED LAN MAGNETICS

960016B

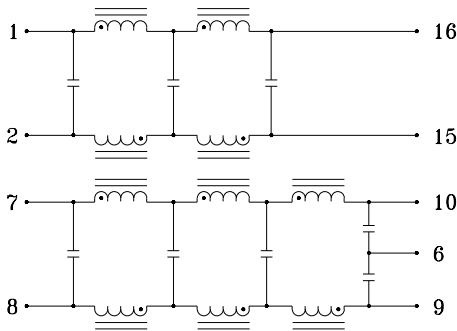
- Designed for use with Microlinear 6692/6694/6698 10/100 Mbps PHY transceivers
- Surface mount or through-hole packaging options
- 2000 Vrms isolation
- Complies with IEEE 802.3 standards
- Switching function integrated within magnetics module

## ELECTRICALS AT 25°C

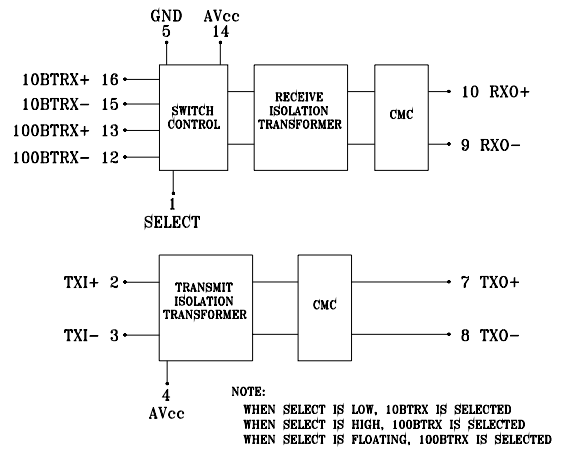
Part No.	Turns Ratio		Inductance OCL (μH) Min @8mA bias	Return Loss (dB) Min 1-10MHz	Insertion Loss (dB) Min 1-10MHz	Attenuation (dB) Min 30MHz	Common to Common Mode Rej (dB) Min		Crosstalk (dB) Min 100kHz-100MHz	Schematic	Package Style
	TX	RX					10-30MHz	100MHz			
0556-1060-00	N/A	N/A	N/A	-15	-1.0	-28	N/A	N/A	N/A	A	1
0558-1060-00	2:1	1:1	350	-18	-1.0	-20	-40	-30	-30	B	1
S556-1060-01	N/A	N/A	N/A	-15	-1.0	-28	N/A	N/A	N/A	C	2
S558-1060-01	2:1	1:1	350	-18	-1.0	-20	-40	-30	-30	D	3

## SCHEMATICS

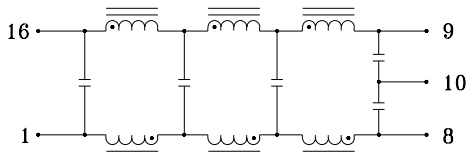
A



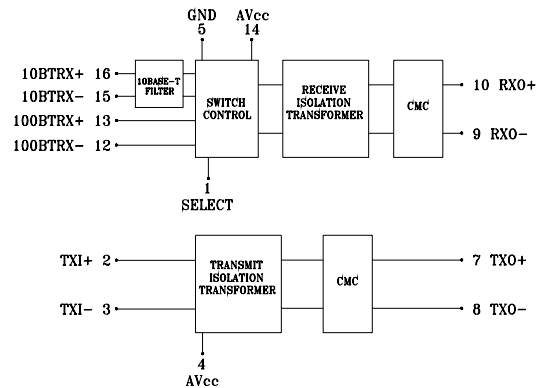
B



C



D



### Corporate Office

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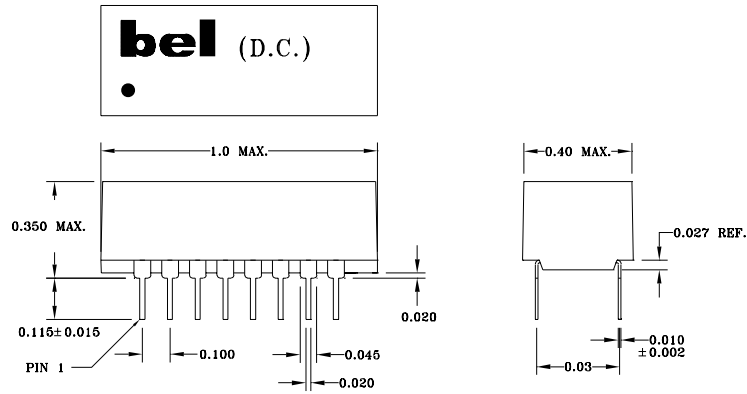
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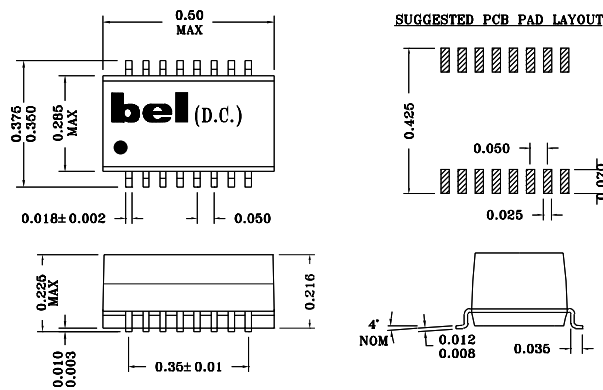
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### MECHANICALS

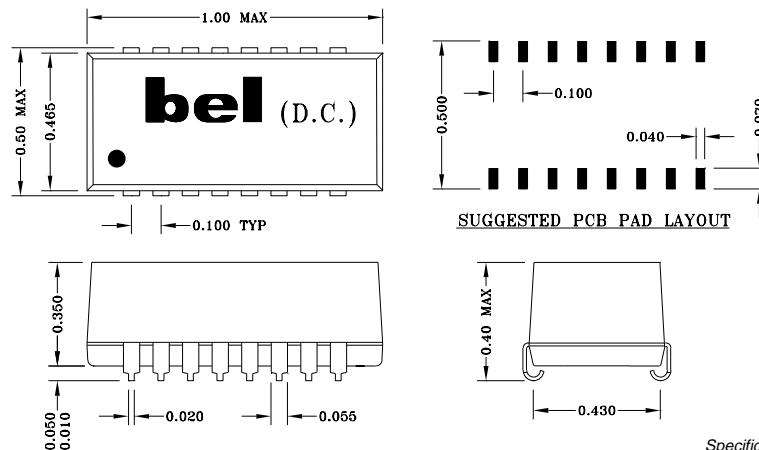
1



2



3



Specifications subject to change without notice.





defining a degree of excellence

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## APPLICATION NOTES

- 0556-1060-00 is for use with 0558-1060-00 and the S556-1060-01 is for use with S558-1060-01.
- These Bel designs are for use with Microlinear 100 Mbps and various 10Base-T PHY devices that may require external filtering. Microlinear provides the following recommendations:

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.

- Vcc operating voltage of the Bel magnetics modules is recommended to be 5 volts, +/-5%.
- Two 1k $\Omega$  resistors are recommended to provide bias voltage to the Microlinear chipset.
- 0.1 $\mu$ F DC blocking capacitors are recommended to provide isolation between the 10 Mbps and 100 Mbps PHY transceivers.

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