

# HIGH SPEED LAN MAGNETICS

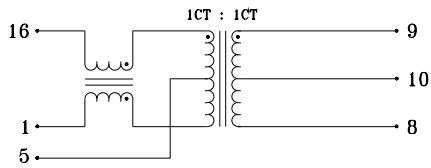
- For use in 100Base-TX, 10/100Base-TX, ATM 155 or 100 Mbps TP-FDDI applications
- Compatible with multiple PHY transceivers
- 350  $\mu$ H min OCL (inductance) with 8mA DC bias
- Low profile, surface mount packaging available
- Low cost, transmit or receive channel solution
- 2000 Vrms isolation

## ELECTRICALS AT 25°C

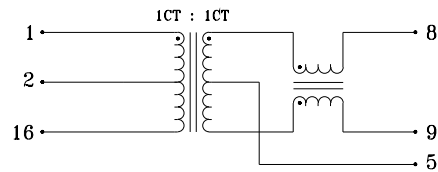
Part No.	Insertion Loss (dB) Typ		Return Loss (dB) Min		Schematic
	1MHz-100MHz	1MHz-30MHz	30MHz-60MHz	60MHz-80MHz	
S558-0139-00	-1.0	-16	16-20log((f/30MHz)	-10	A
S558-3855-00	-1.0	-16	16-20log((f/30MHz)	-10	B
S558-5999-02	-1.0	-16	16-20log((f/30MHz)	-10	A
S558-5999-19	-1.0	-16	16-20log((f/30MHz)	-10	B

## SCHEMATICS

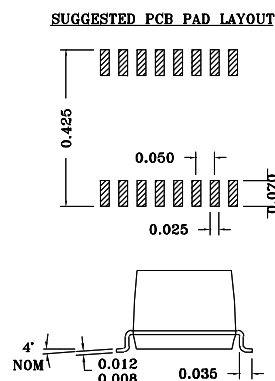
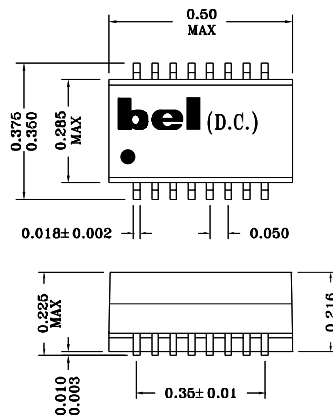
A



B



## MECHANICAL



Specifications subject to change without notice.

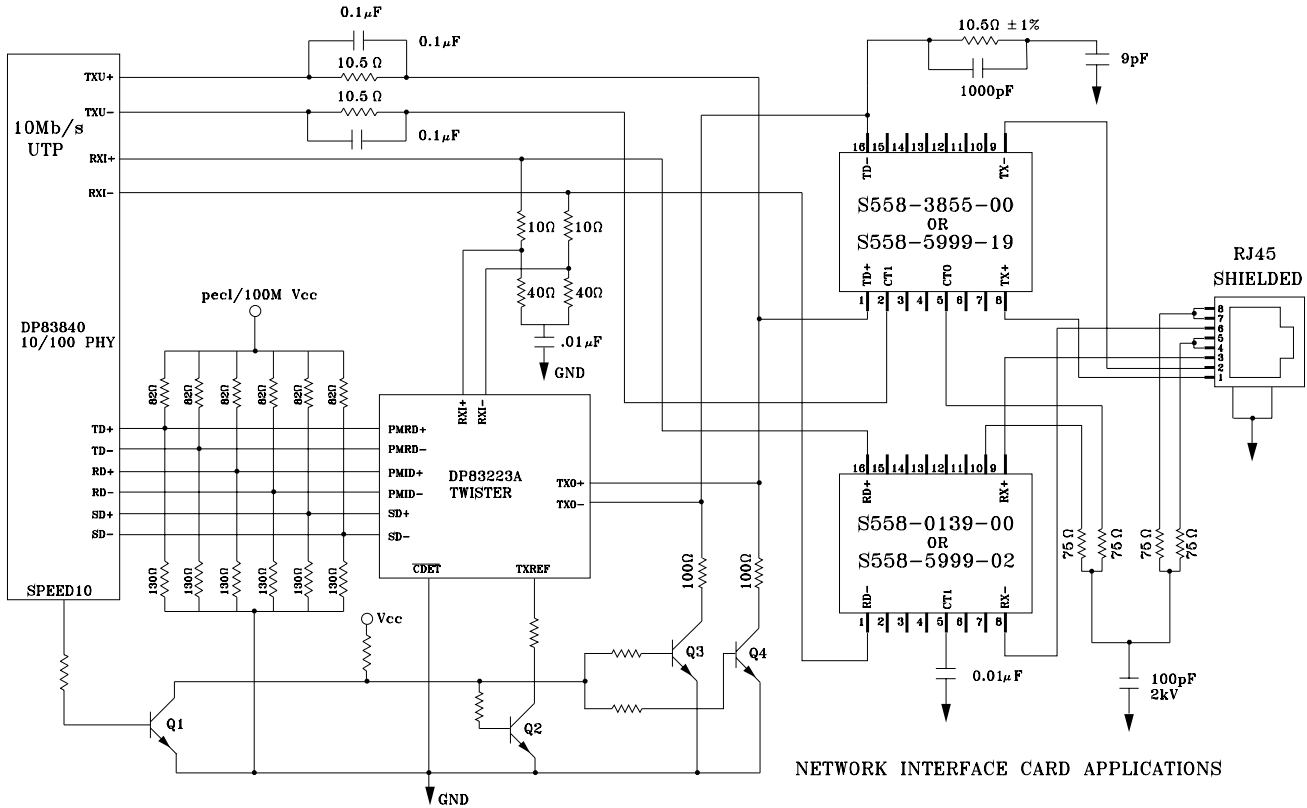


defining a degree of excellence

# HIGH SPEED LAN MAGNETICS

960025A

## APPLICATION CIRCUIT



## APPLICATION NOTES

- These Bel part types have been designed for use in 100 Mbps TP-FDDI, 100Base-TX, 10/100Base-TX and ATM 155 Mbps applications over Category 5 UTP or STP cable.
- Each Bel part type is designed with high voltage isolation transformers and common mode chokes and can be used on both the transmit and receive channels. The designs have been created to provide 350μH OCL with 8mA DC bias applied. Consult the Bel short form catalog and applicable application circuit for the specific configuration of each individual part type.
- 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.

### Corporate Office

**Bel Fuse Inc.**  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: http://www.belfuse.com

### Far East Office

**Bel Fuse Ltd.**  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

### European Office

**Bel Fuse Europe Ltd.**  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366