

HIGH SPEED LAN MAGNETICS

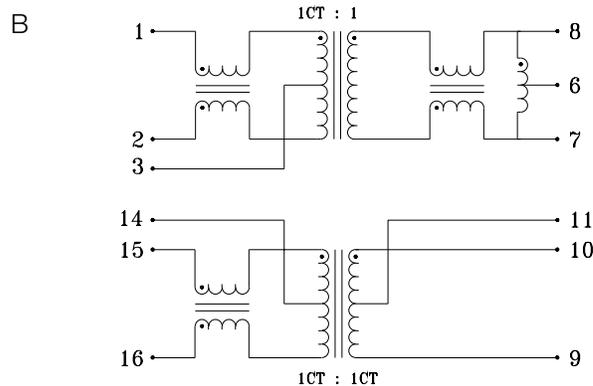
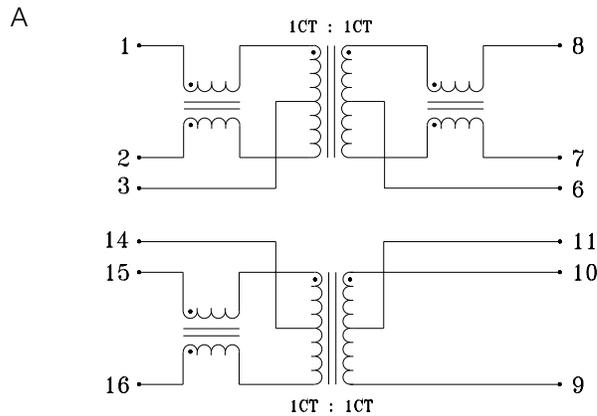
960020A

- For use in 100Base-TX, 10/100Base-TX, ATM 155 or 100 Mbps TP-FDDI applications
- Compatible with multiple PHY transceivers
- Low profile, surface mount or through-hole packaging available
- Available with or without impedance matched common mode termination on the transmit channel

ELECTRICALS AT 25°C

| Part No. | Inductance OCL (μH) Min @8mA DC bias | Isolation Vrms Min | Insertion Loss (dB) Typ 1MHz-100MHz | CMDR (dB) Min | | CMCM (dB) Min | | Crosstalk (dB) Max 1MHz-100MHz | Schematic | Package Style |
|--------------|--|--------------------------|---|------------------|--------|------------------|--------|--------------------------------------|-----------|------------------|
| | | | | 30MHz | 100MHz | 30MHz | 100MHz | | | |
| A558-5999-01 | 350 | 2000 | -1.0 | -50 | -40 | -40 | -30 | -30 | A | 1 |
| S558-5999-01 | 350 | 2000 | -1.0 | -50 | -40 | -40 | -30 | -30 | A | 2 |
| S558-5999-30 | 350 | 2000 | -1.0 | -50 | -40 | -40 | -30 | -30 | A | 3 |
| S558-5999-42 | 350 | 2000 | -1.0 | -50 | -40 | -40 | -30 | -30 | A | 4 |
| S558-5999-90 | 350 | 2000 | -1.0 | -50 | -40 | -40 | -30 | -30 | B | 4 |

SCHEMATICS



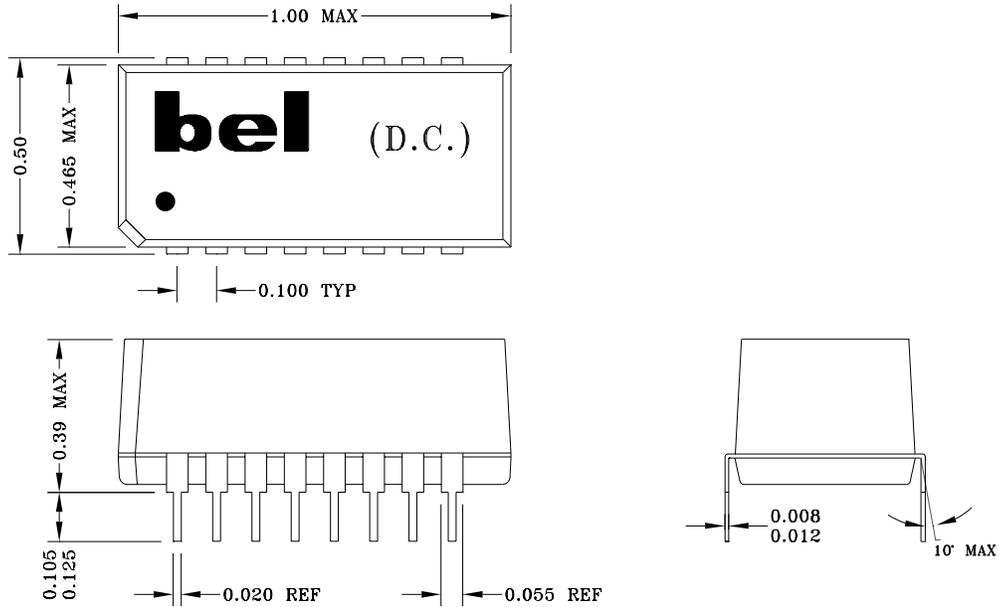
Specifications subject to change without notice.

HIGH SPEED LAN MAGNETICS

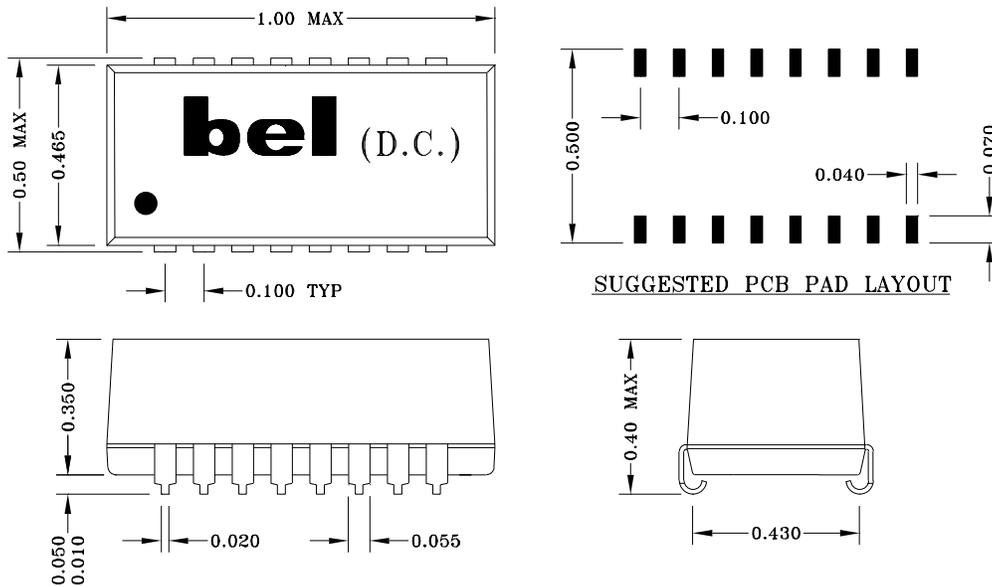
960020A

MECHANICALS

1



2

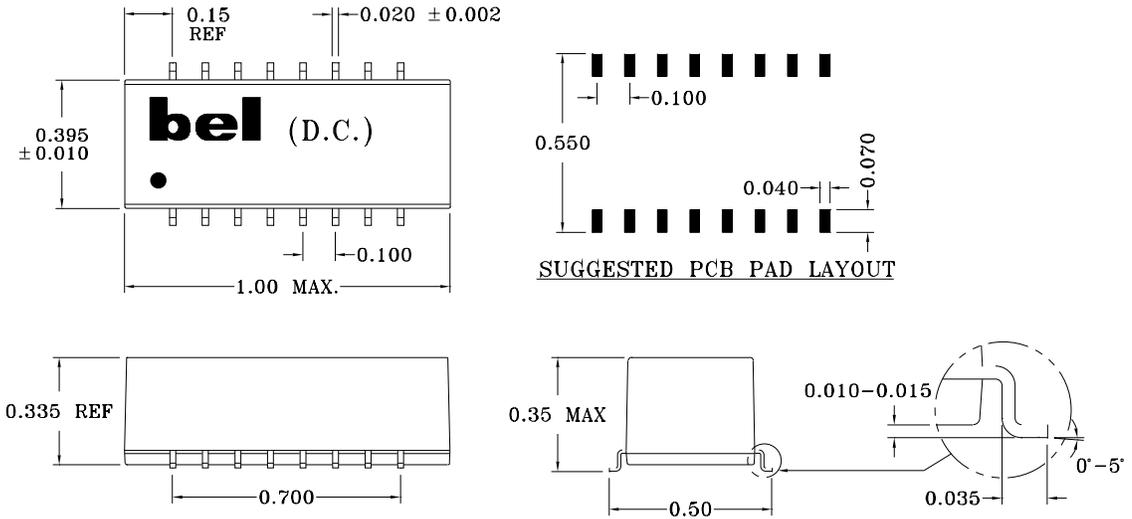


Specifications subject to change without notice.

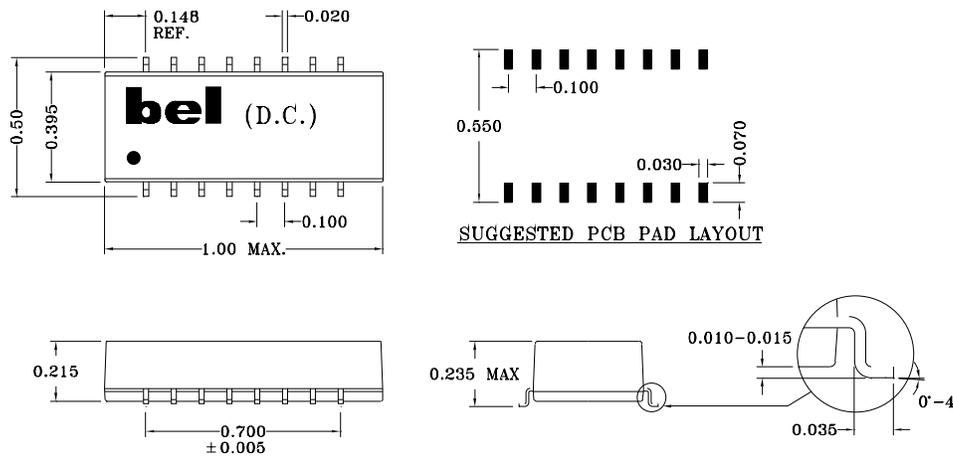
HIGH SPEED LAN MAGNETICS

MECHANICALS (CONT'D)

3



4

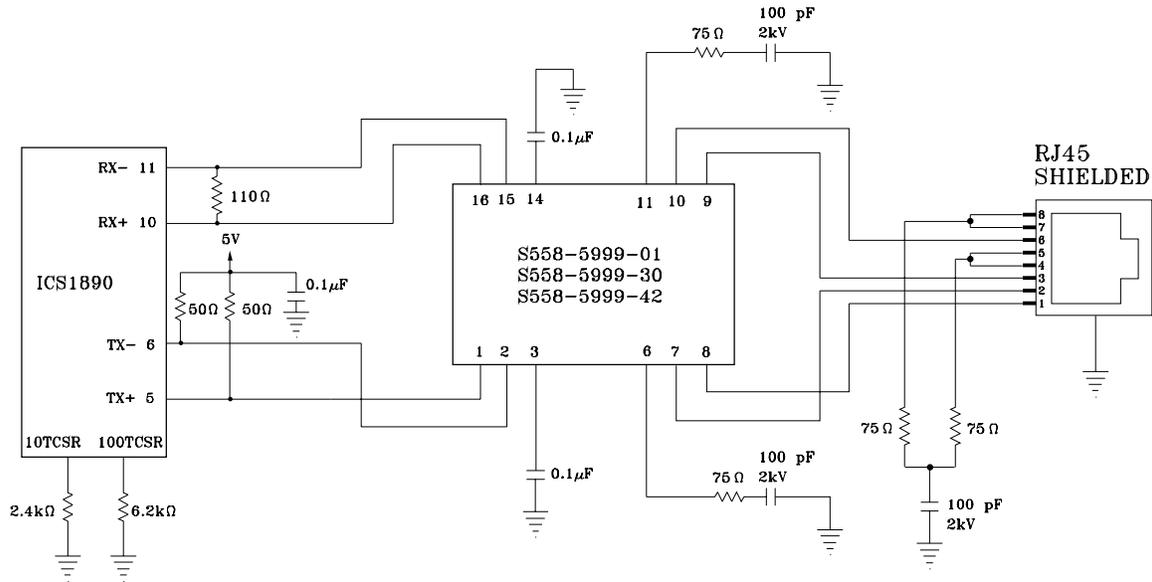


Specifications subject to change without notice.

HIGH SPEED LAN MAGNETICS

960020A

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. The S558-5999-90 also includes an impedance matched common mode termination. For background details concerning the proper implementation or complete elimination of this termination circuit, please request Bel's separate application note available on this subject. All designs have been created to provide 350μH OCL with 8mA DC bias applied. Consult the Bel short form catalog and recommended application circuit for the specific configuration of each individual part type.
- The surface mount packages are designed 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