

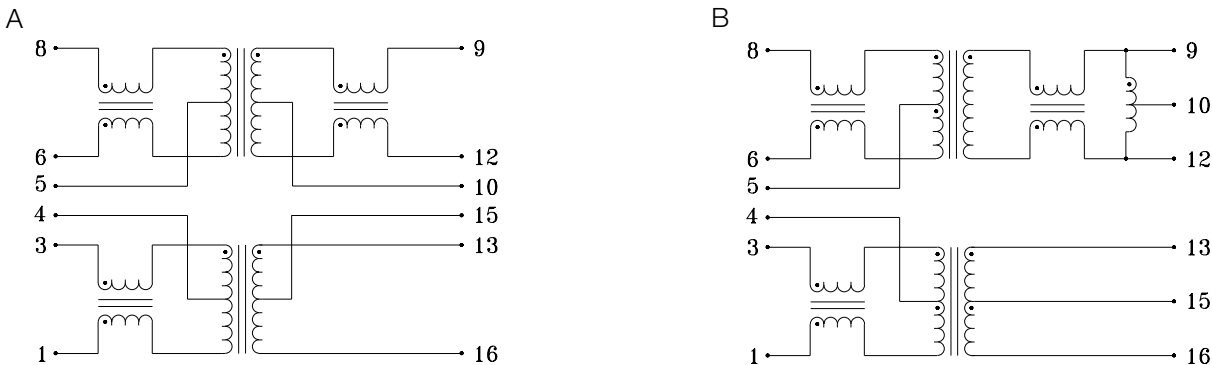
HIGH SPEED LAN MAGNETICS

- 100Base-TX, 10/100Base-TX, ATM155 or 100 Mbps TP-FDDI applications
- Available with or without impedance matched common mode termination
- Compatible with multiple transceivers
- 2000 Vrms isolation
- Low profile, surface mount or through-hole packaging available
- 350µH OCL (inductance) @ 8mA bias

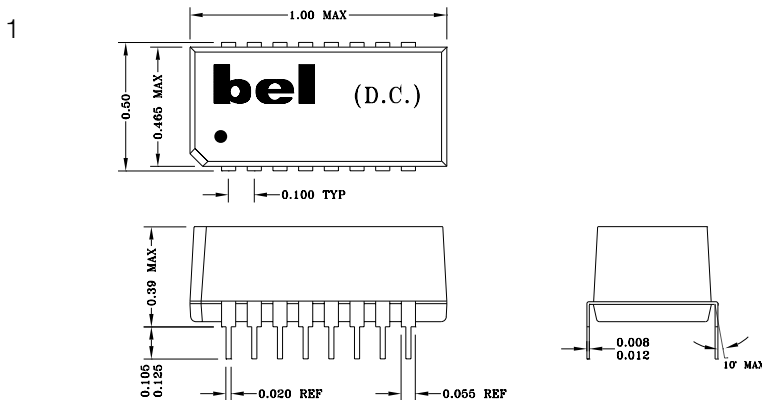
ELECTRICALS AT 25°C

Part No.	Insertion Loss (dB) Typ 1MHz-100MHz	Return Loss (dB) Min 1MHz-30MHz	Return Loss (dB) Min 30MHz-60MHz	Return Loss (dB) Min 60MHz-80MHz	Crosstalk (dB) Min 1MHz-100MHz	Common to Diff Mode Rej (dB) Min		Common to Common Mode Rej (dB) Min		Schematic	Package Style
						30MHz	100MHz	30MHz	100MHz		
A558-5999-00	-1.0	-16	16-20log(f/30MHz)	-10	-30	-40	-30	-50	-40	A	1
S558-5999-00	-1.0	-16	16-20log(f/30MHz)	-10	-30	-40	-30	-50	-40	A	2
S558-5999-43	-1.0	-16	16-20log(f/30MHz)	-10	-30	-40	-30	-50	-40	B	3
S558-5999-44	-1.0	-16	16-20log(f/30MHz)	-10	-30	-40	-30	-50	-40	B	4
S558-5999-45	-1.0	-16	16-20log(f/30MHz)	-10	-30	-40	-30	-50	-40	A	3

SCHEMATICS



MECHANICALS



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>

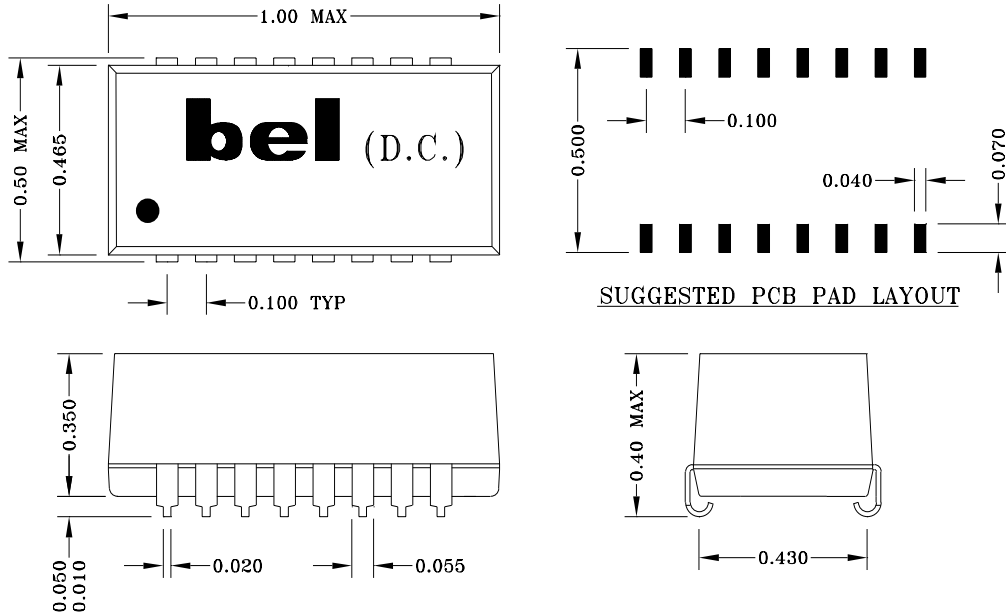
Far East Office
Bel Fuse Ltd.
 8F/8 Luk Hop Street
 San Po Kong
 Kowloon, Hong Kong
 Tel: 852-2328-5515
 Fax: 852-2352-3706

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

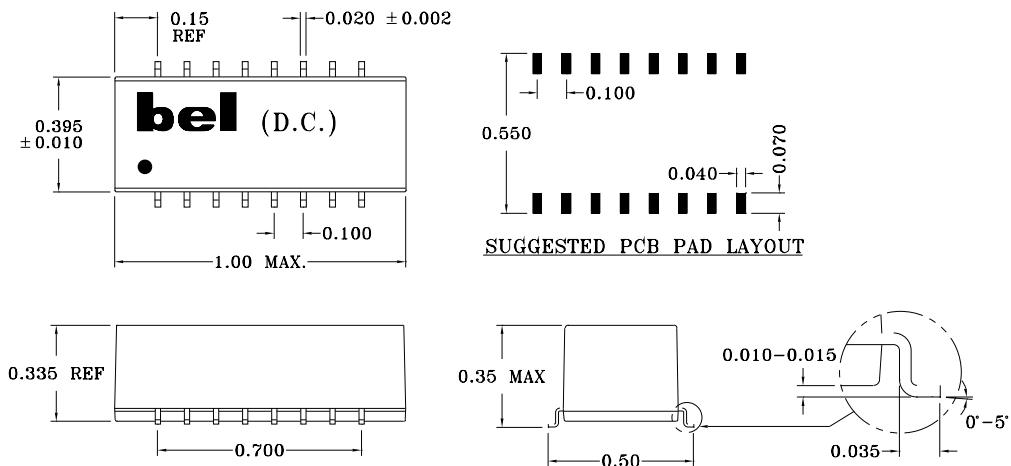
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MECHANICALS (CONT'D)

2



3

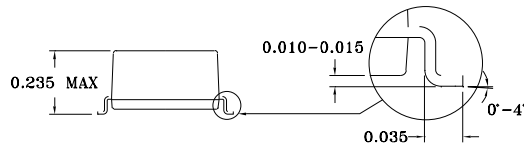
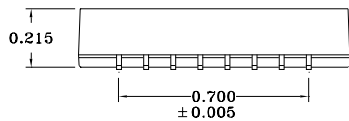
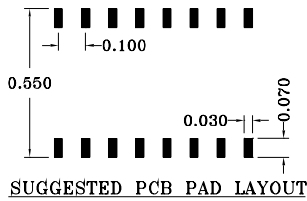
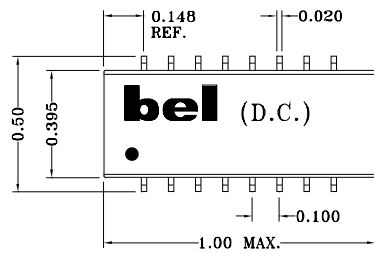


Specifications subject to change without notice.

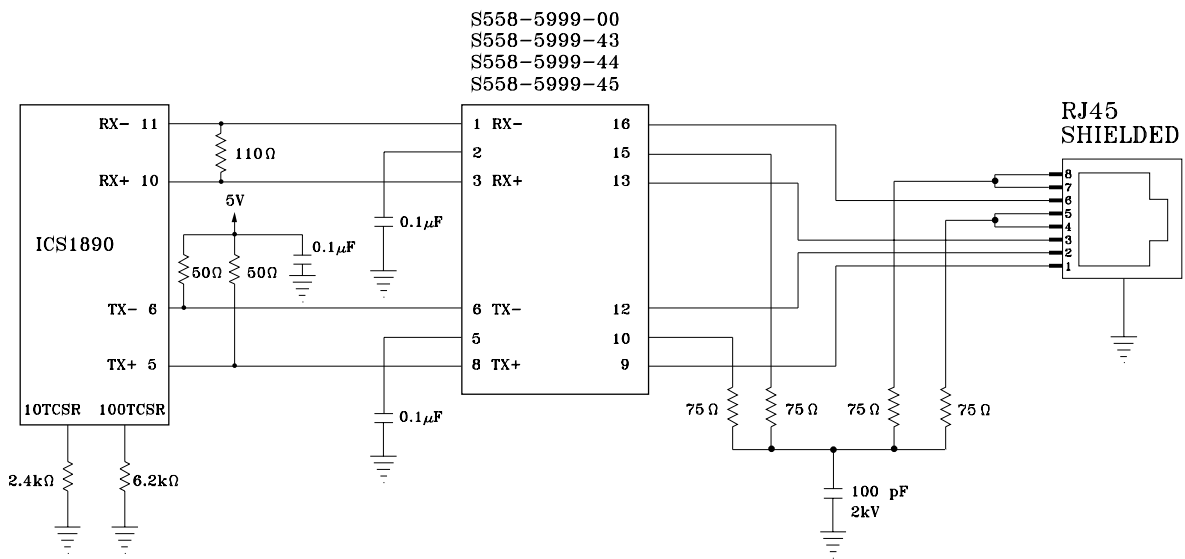
HIGH SPEED LAN MAGNETICS

MECHANICALS (CONT'D)

4

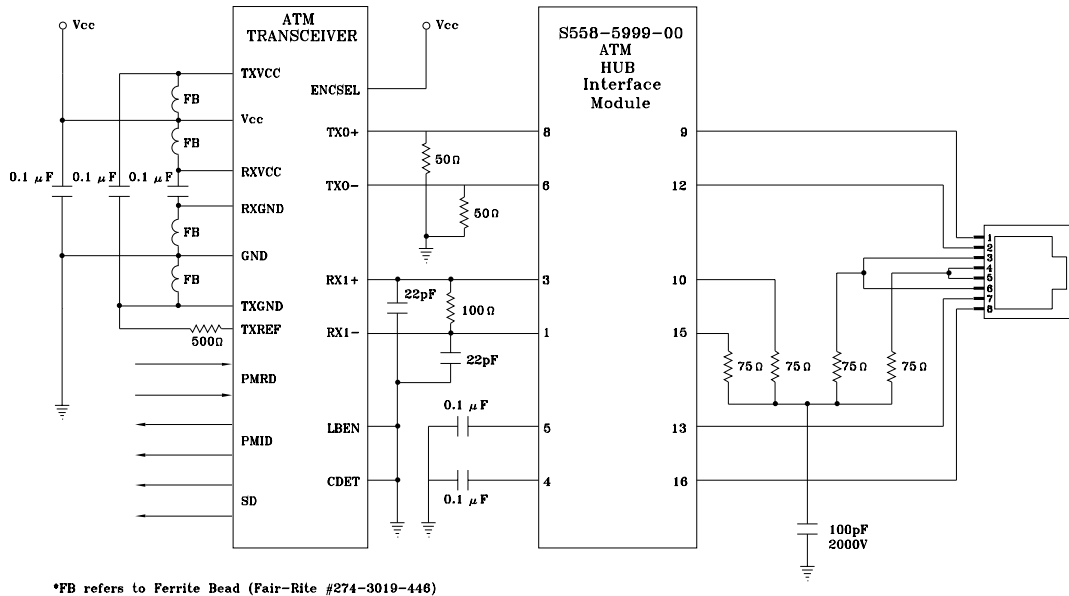


APPLICATION CIRCUITS



Specifications subject to change without notice.

APPLICATION CIRCUITS (CONT'D)



*FB refers to Ferrite Bead (Fair-Rite #274-3019-446)

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 part type provides high voltage isolation, wave shaping, superior EMI and noise suppression and fast rise times. All parts meet IEEE 802.3, ANSI X3T9.5 and ATM Forum Committee standards.
- Each Bel part type is designed with high voltage isolation transformers and common mode chokes. The S558-5999-43 and -44 also contain an impedance matched common mode termination. For background information on the proper implementation or complete elimination of this termination consult Bel's separate application note available on this subject. All designs have been created to provide 350μH OCL (inductance) with 8mA DC bias applied. Consult the Bel short form catalog and recommended 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.

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