

# HIGH FREQUENCY MAGNETICS

## T1/E1 Quad Transformer Module



TM01101

- Four transformers in one surface-mount 40-pin package
- Optimized for two-channel operation with three line impedances: 75Ω, 100Ω, 120Ω
- Integrated common-mode chokes for maximum EMI suppression
- Meets ITU-T G.703 return loss from -40°C to +85°C when operated with matched impedances
- Center taps provided for optional Simplex line powering
- Operating temperature range: -40°C to +85°C
- Meets IEC 695, 2-2 flammability requirements
- PWB Process Capability: Standard printed wiring board assembly techniques, total-immersion cleaning
- Reliability testing: Shock, vibration, temperature cycling, temperature - humidity - bias
- Interwinding breakdown voltage: 1500 Vrms, min

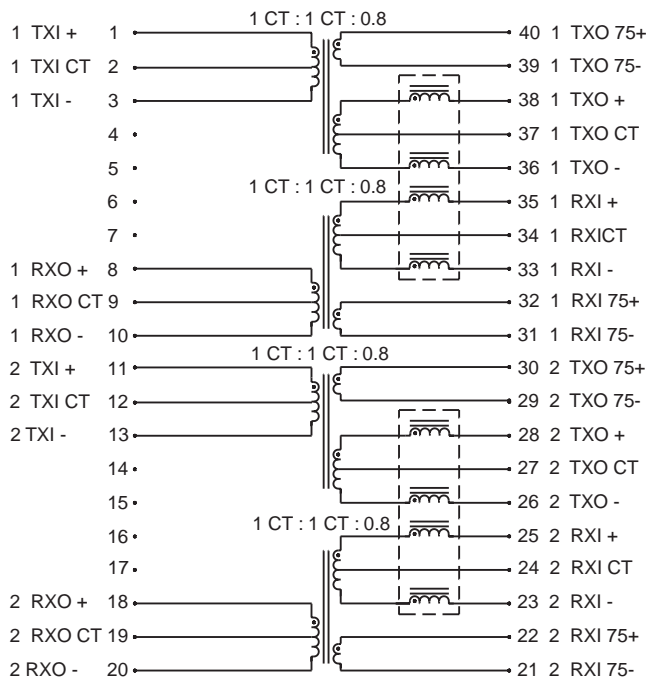
### ELECTRICAL SPECIFICATIONS AT 25° C

Part Number	Ratios			Inductance <sup>1</sup> mH min		Leakage Inductance <sup>1</sup> μH max		DCR Ω max			Interwinding Capacitance pF max
		TXI : TXO	RXI : RXO	TXI	RXO	TXI	RXO	TXI RXO	TXO RXI	TX75 RX75	
S553-6500-B5	N ± 2%	1 CT : 1 CT	1 CT : 1 CT	1.9	1.9	0.6	0.6	0.9	1.6	0.8	30
	Z (T1)	100Ω : 100Ω	100Ω : 100Ω								
	Z (E1)	120Ω : 120Ω 120Ω : 75Ω	120Ω : 120Ω 75Ω : 120Ω								

1. 100 kHz, 0.1 Vrms

### SCHEMATIC

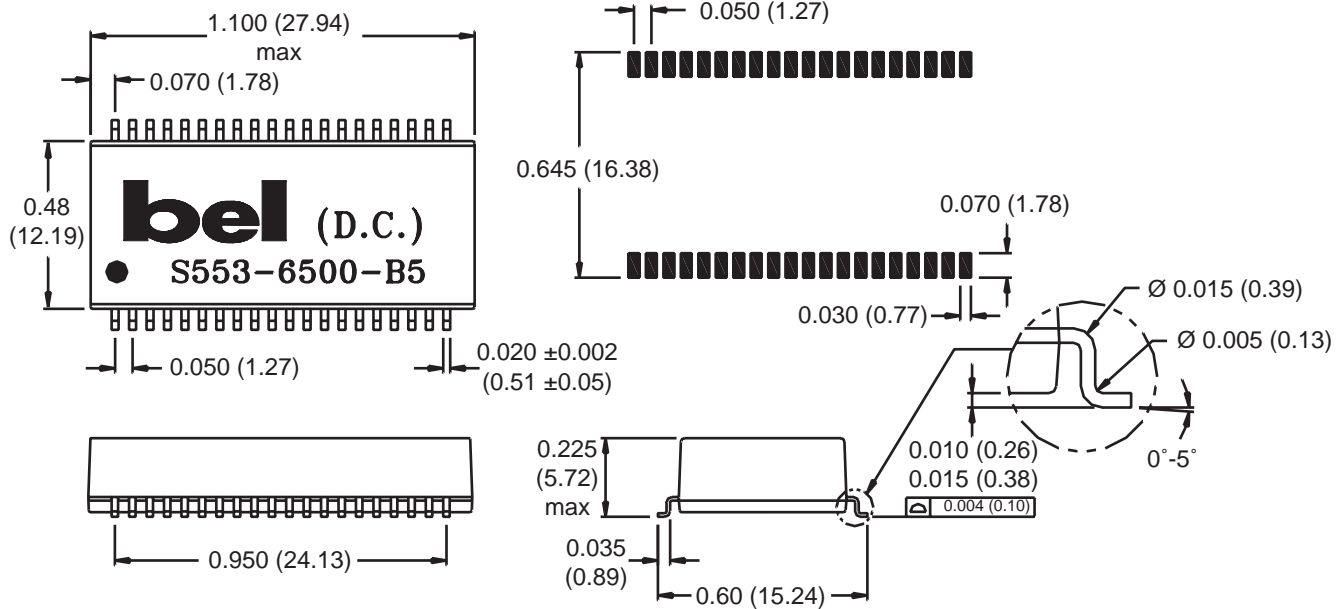
S553-6500-B5



©2001 Bel Fuse Inc. Specifications subject to change without notice. 02.01

### MECHANICAL

#### S553-6500-B5



Dimensions are in inches (millimeters).  
Standard dimension tolerance is  $\pm 0.010$  (0.25) unless otherwise noted.

### Tape and Reel Packaging

44 mm wide by 24 mm pitch; 13 inch OD, 4 inch ID  
200 modules per reel, maximum  
Meets ANSI/EIA 481-2 Carrier Tape Standards-JEDEC SO Package

#### CORPORATE

**Bel Fuse Inc.**  
198 Van Vorst Street  
Jersey City, NJ 07302  
Tel 201-432-0463  
Fax 201-432-9542  
www.belfuse.com

#### FAR EAST

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

#### EUROPE

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Suite G7, Preston  
Lancashire, PR1 8UD, U.K.  
Tel 44-1772-556601  
Fax 44-1772-888366  
www.belfuse.com