

# HIGH FREQUENCY MAGNETICS

## T1/E1 Dual Transformer

TM02126

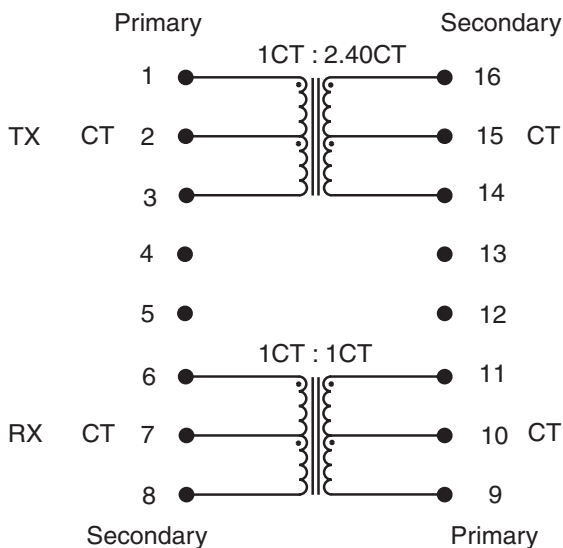
- Optimized for Infineon PEB 2256, PEB 22504 and PEB 22554 line interface devices
- Transmit transformer and receive transformer in one surface mount package
- Center taps provided to facilitate phantom powering
- Available with 75Ω tap on receive transformer as S553-6500-A5
- Meets ITU-T G.703 return loss from -40° to +85° C from 51 kHz to 3.072 MHz
- Operating temperature range -40° 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
- UL 1950 approved: file number E150991

### ELECTRICAL SPECIFICATIONS at 25° C

Part Number	Turns Ratio ±2%		Primary Inductance at 10 kHz		Leakage Inductance at 1 MHz		DCR Ω max				Capacitance pF max
	IC : Line		mH min		μH max		Primary		Secondary		Pri to Sec
	TX	RX	TX	RX	TX	RX	TX	RX	TX	RX	
S553-6500-A6	1CT : 2.40CT	1CT : 1CT	1.0	1.8	0.3	0.5	0.6	0.7	1.4	0.7	35

### SCHEMATIC

#### S553-6500-A6



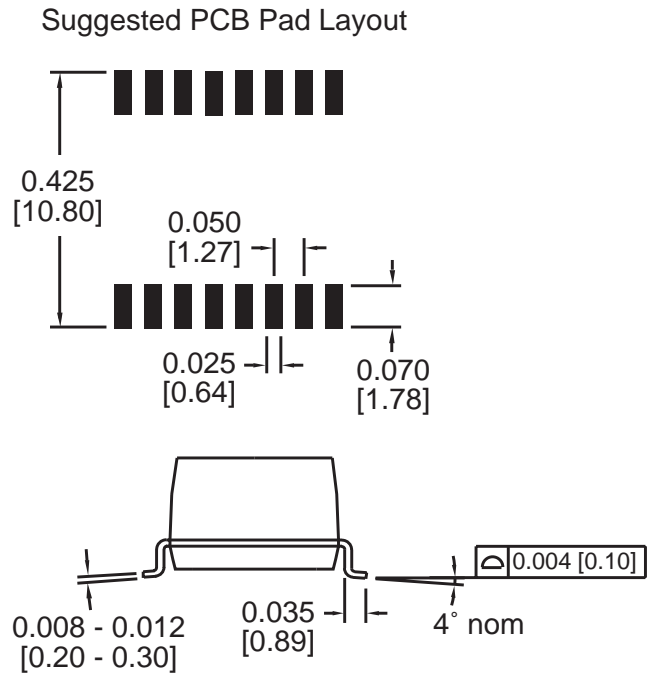
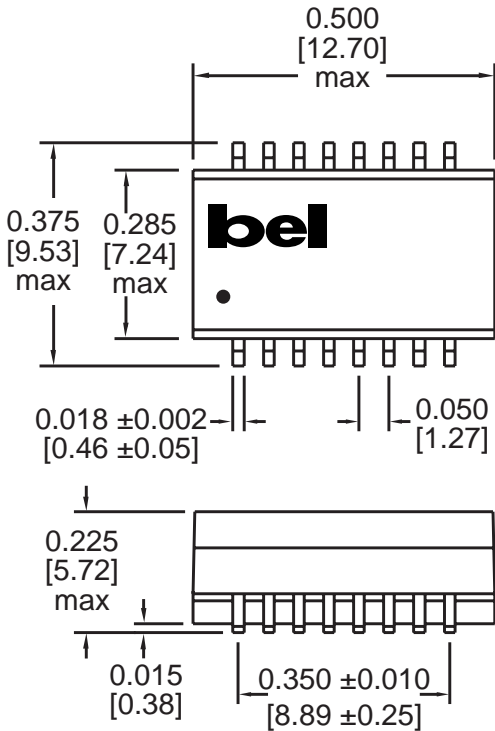
Return Loss at 102 kHz 120Ω Application <sup>1</sup>			
25° C dB typ		-40 to +85° C dB min	
TX	RX	TX	RX
18	32	18	19

1. IC side terminated in 15 Ω for TX and 120 Ω for RX

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### MECHANICAL

S553-6500-A6



Dimensions are in inches [millimeters].  
 Standard dimension tolerance is ±0.005 [0.13] unless otherwise noted.

### Tape and Reel Packaging

24 mm wide by 12 mm pitch; 13 inch OD, 4 inch ID  
 750 modules per reel, maximum  
 Meets ANSI/EIA 481-2 Carrier Tape Standards - JEDEC SO Package

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#### CORPORATE

**Bel Fuse Inc.**  
 206 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