

HIGH FREQUENCY MAGNETICS

T1/E1 Dual Transformer

TM02127

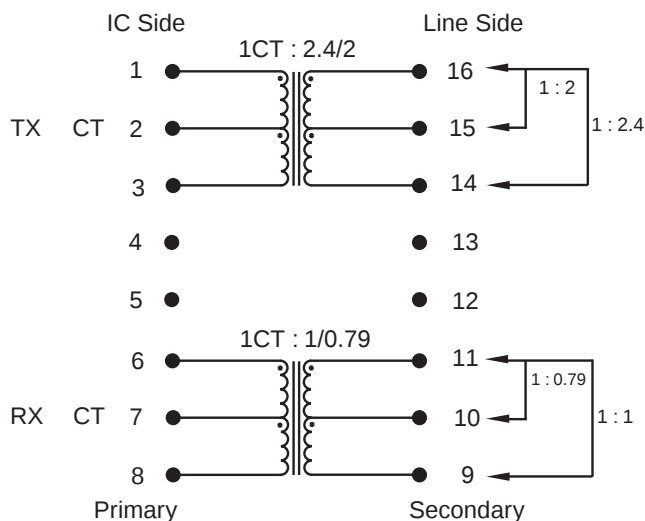
- Optimized for Infineon PEB 2256, PEB 22504 and PEB 22554 line interface devices
- Transmit transformer and receive transformer in one surface mount package
- Multiple transformation ratios available in one dual module using tapped transformers
- Available with line side center taps as S553-6500-A6
- 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	
	TX ¹	RX ²	TX	RX	TX	RX	TX	RX	TX	RX
S553-6500-A5	1CT : 2.4 or 2	1CT : 1 or 0.79	1.8	1.8	0.4	0.5	0.7	0.75	1.7	0.75

SCHEMATIC

S553-6500-A5



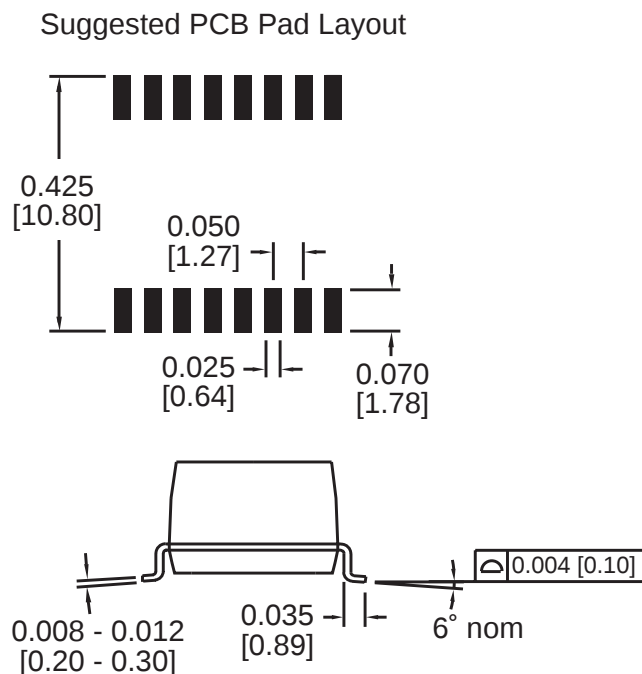
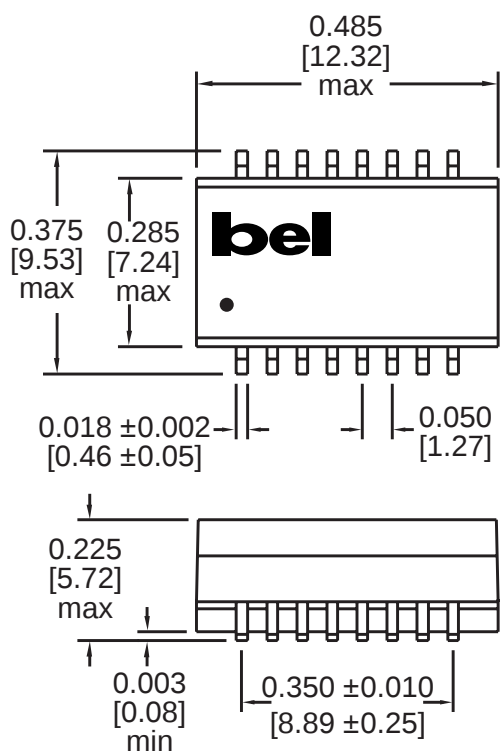
Return Loss at 102 kHz 120Ω Application ³			
25° C dB typ		-40 to +85° C dB min	
TX	RX	TX	RX
18	32	18	19

- 1CT : 2.4 = (1-2-3) : (16-14); 1CT : 2 = (1-2-3) : (16-15)
- 1CT : 1 = (6-7-8) : (11-9); 1CT : 0.79 = (6-7-8) : (11-10)
- IC side terminated in 15 Ω for TX (1 : 2.4 operation) and 120 Ω for RX (1 : 1 operation)

Note: Optional receive ratio of 1 : 0.79 allows connection of 75Ω cable to pins 11 and 10 so that IC side resistor of 120Ω can be used for both 75Ω and 120Ω lines.

MECHANICAL

S553-6500-A5



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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