

# HIGH FREQUENCY MAGNETICS

## T1/E1 Mini-Octal Transformer Module

TM01118

- Optimized for line interface devices listed on next page
- Eight transformers in a single surface mount package
- Miniature octal 32-pin platform provides 33% area reduction compared to standard octal package
- Meets ITU-T G.703 return loss from -40° to +85° C
- UL 1950 approved: file number E150991
- 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

### ELECTRICAL SPECIFICATIONS at 25° C

Part Number	Turns Ratio ±2%	Inductance <sup>1</sup> mH min	Leakage Inductance <sup>1</sup> µH max	DCR Ω max		Interwinding Capacitance pF max	Return Loss at 102 kHz <sup>2</sup>			
							25° C dB typ		-40 to +85° C dB min	
				IC : Line	IC Side		100Ω	120Ω	100Ω	120Ω
S553-6500-C4	1 : 2	1.5	0.3	0.6	1.2	35	24	29	23	26

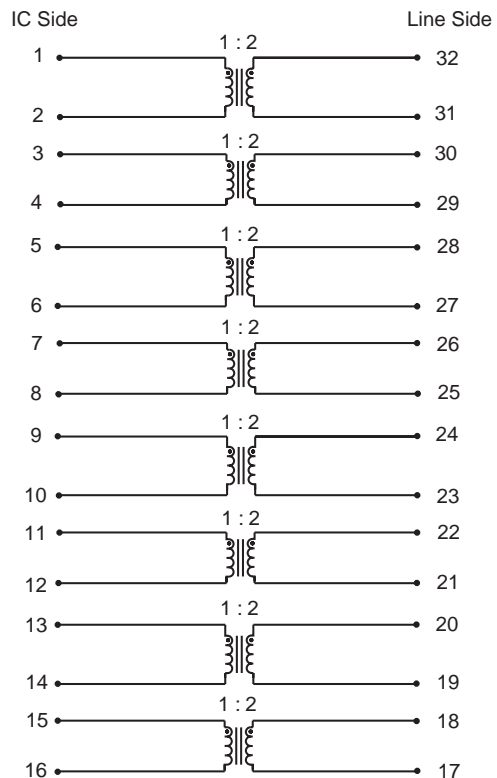
1. Inductance at 10 kHz; leakage inductance at 1 MHz
2. IC side terminated in 27 Ω

### SCHEMATIC

For 8 channel applications, minimum crosstalk is achieved when one S553-6500-C4 module is used for all receive interfaces and a second module is used for all transmit interfaces.

No signal assignments are shown on the schematic as users have total flexibility to connect module as discussed above, or to alternate transmit and receive interfaces within a single module.

S553-6500-C4



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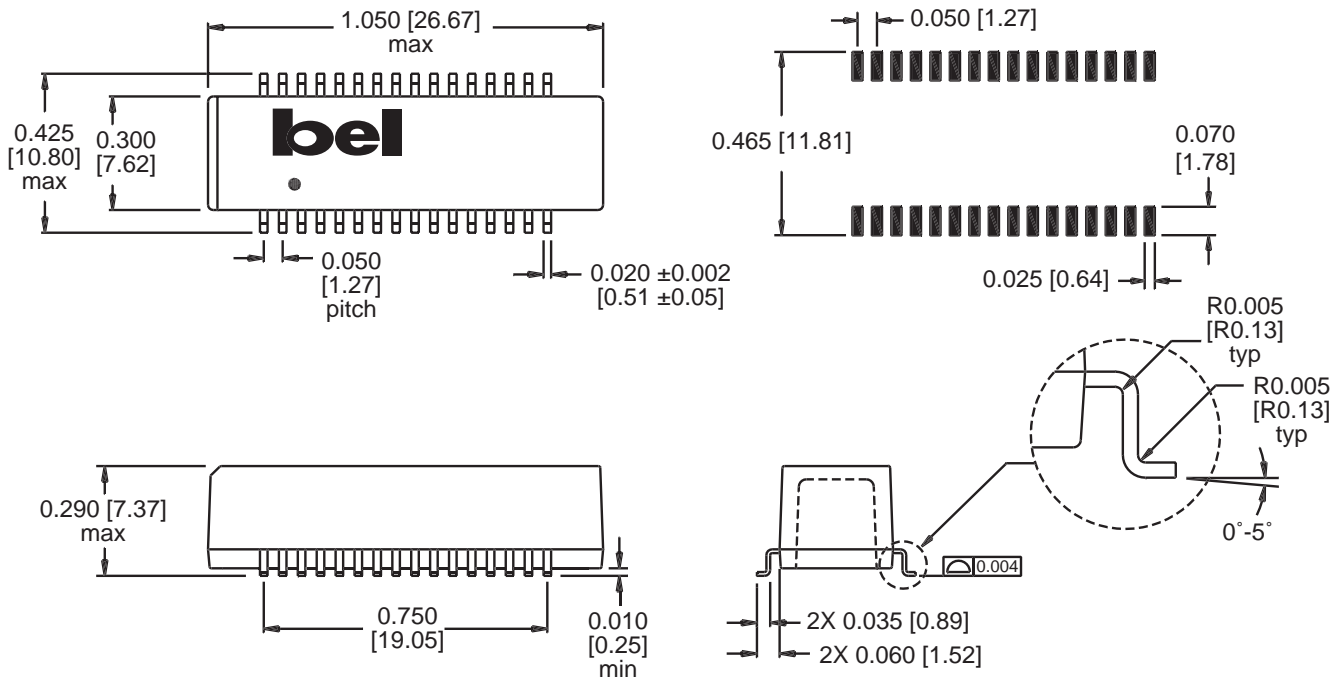
TM01118

#### MECHANICAL

Meets or exceeds all circuit requirements for:

PMC Sierra PM4318  
 Intel LXT384, LXT386  
 Conexant CN8380  
 Exar XRT5997, XRT81L27, XRT82L24, XRT82L34, XRT82L38

#### S553-6500-C4



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

#### Tape and Reel Packaging

44 mm wide by 16 mm pitch; 13 inch OD, 4 inch ID  
 400 modules per reel, maximum  
 Meets ANSI/EIA 481-2 Carrier Tape Standards - JEDEC SO Package

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