

# HIGH FREQUENCY MAGNETICS

## T1/E1 Mini-Octal Transformer Module

TM01121

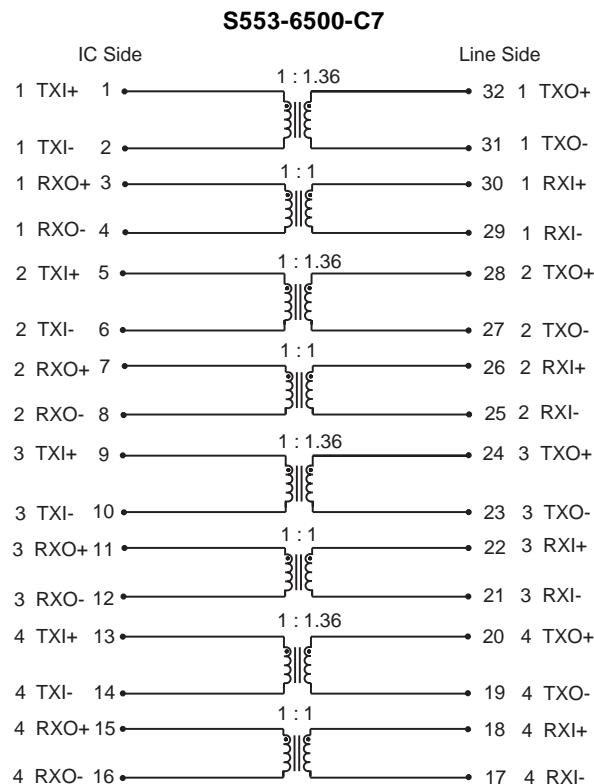
- Optimized for line interface devices listed on next page
- Eight transformers in a single surface mount package
- Miniature octal 32-pin platform provides 33% area reduction compared to standard octal package
- Electrically identical to S553-6500-B7
- Meets ITU-T G.703 return loss from -40° to +85° 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%		Primary Inductance at 10 kHz		Leakage Inductance at 1 MHz		DCR Ω max				Capacitance pF max	Return Loss at 102 kHz 120Ω Application <sup>1</sup>			
	IC : Line		mH min		μH max		IC Side		Line Side		Winding to Winding	25° C dB typ		-40 to +85° C dB min	
	TX	RX	TX	RX	TX	RX	TX	RX	TX	RX		TX	RX	TX	RX
S553-6500-C7	1 : 1.36	1 : 1	1.6	1.8	0.6	0.5	0.6	0.6	0.7	0.6	35	21	30	18	19

1. Terminated in 54 Ω for TX and 120 Ω for RX

### SCHEMATIC



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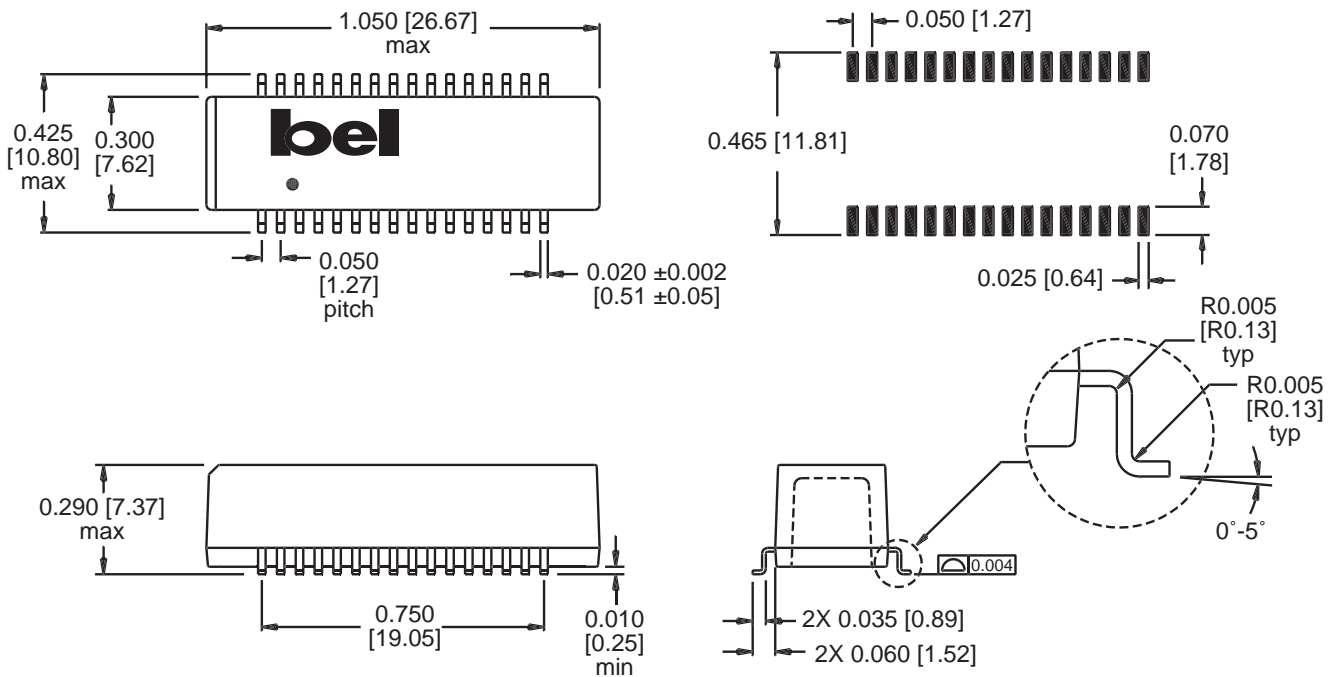
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#### MECHANICAL

Meets or exceeds all circuit requirements for:

Dallas DS21Q48, DS21Q552, DS21Q554,  
Intel LXT334, LXT335  
Conexant BT8370, BT8375, BT8376

#### S553-6500-C7



Dimensions are in inches [millimeters].  
Standard dimension tolerance is  $\pm 0.005$  [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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