

# HIGH FREQUENCY MAGNETICS

## T1/E1 Octal Transformer Module

TM01115

- Optimized for Agere multi-channel 5-V devices: T7630, T7688, T7690, T7698, TLIU04C1
- Eight transformers in one surface-mount package
- Optimized for E1 120 Ω applications
- Meets return loss advertised by Agere (greater than required by ITU-T G.703) 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
- Transmit and receive transformers optimized independently

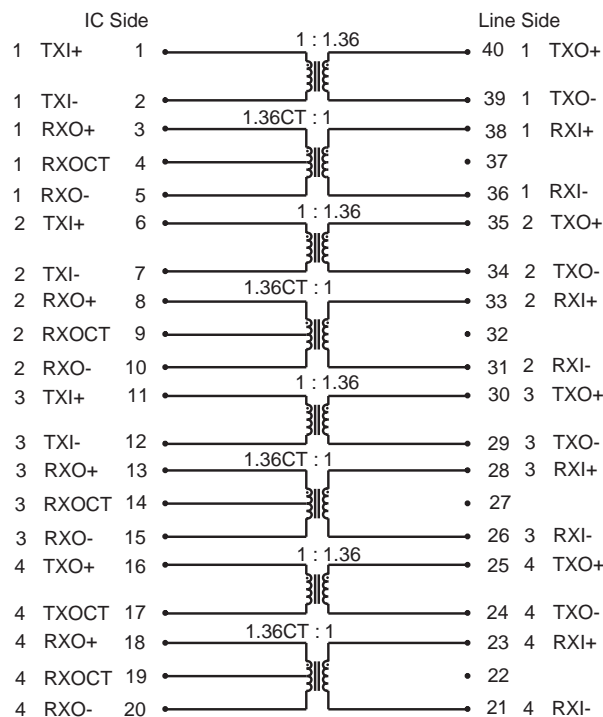
### ELECTRICAL SPECIFICATIONS at 25° C

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-D9	1 : 1.36	1.36CT : 1	1.6	2.0	0.6	0.6	0.65	1.2	0.85	0.9	35	19	30	17	20

1. Terminated in 52.2 Ω for TX and 221.6 Ω for RX

### SCHEMATIC

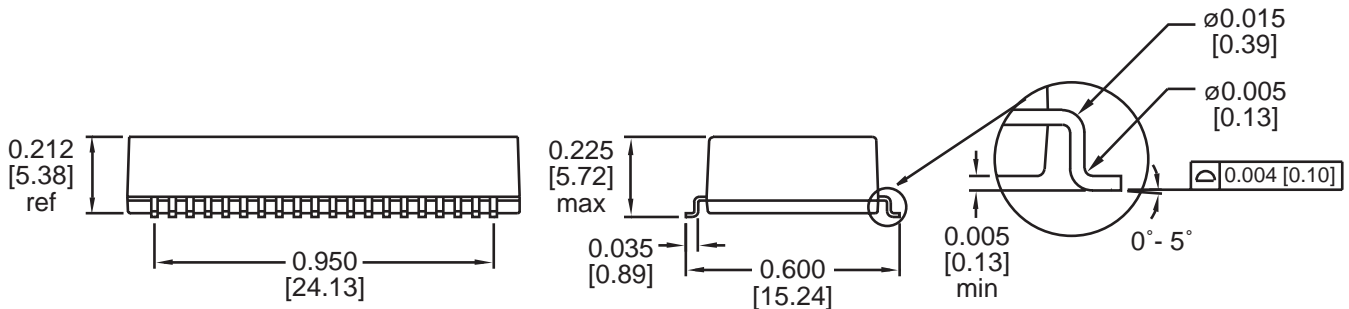
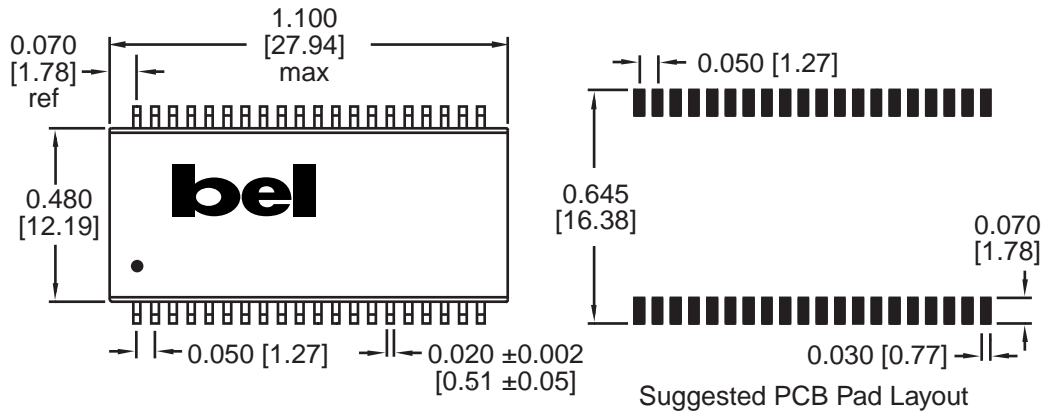
S553-6500-D9



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#### MECHANICAL

S553-6500-D9



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 24 mm pitch; 13 inch OD, 6 inch ID  
200 modules per reel, maximum  
Meets ANSI/EIA 481-2 Carrier Tape Standards - JEDEC SO Package

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