

HIGH FREQUENCY MAGNETICS

DS3/E3/STS-1 Quad Transformer

TM02135

- Optimized for line transceivers operating at E3, DS3 or STS-1 rates: 34.368 Mb/s, 44.736 Mb/s, 51.84 Mb/s
- Transmit and receive transformers in one surface mount package
- Meets ITU-T G.703 return loss from -40° to +85° C from 860 kHz to 51.55 MHz
- 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 100 kHz				Leakage Inductance at 1 MHz		Capacitance C w/w	Return Loss at 1.72 MHz 75Ω Application ¹			
	IC : Line		25° C μH min		-40° C μH min		μH max		pF max	25° C dB typ		-40 to +85° C dB min	
	TX	RX	TX	RX	TX	RX	TX	RX	TX & RX	TX	RX	TX	RX
S554-6500-29	1 : 1	1 : 1	80	80	40	40	0.09	0.09	10	25	25	18	18

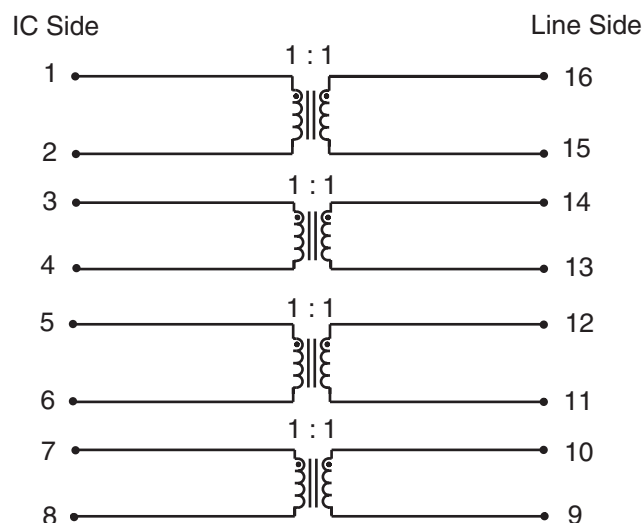
1. Terminated in 75 Ω on IC side

SCHEMATIC

The module is symmetrical and either side can be connected to the IC or to the line.

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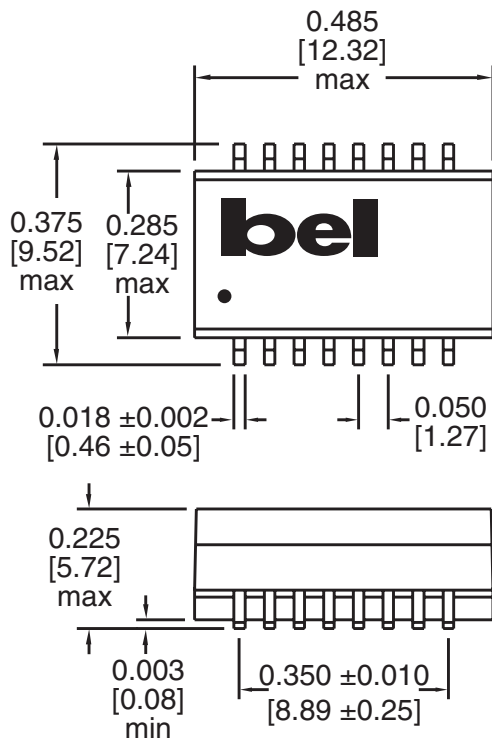
All transformers will support either TX or RX operation.



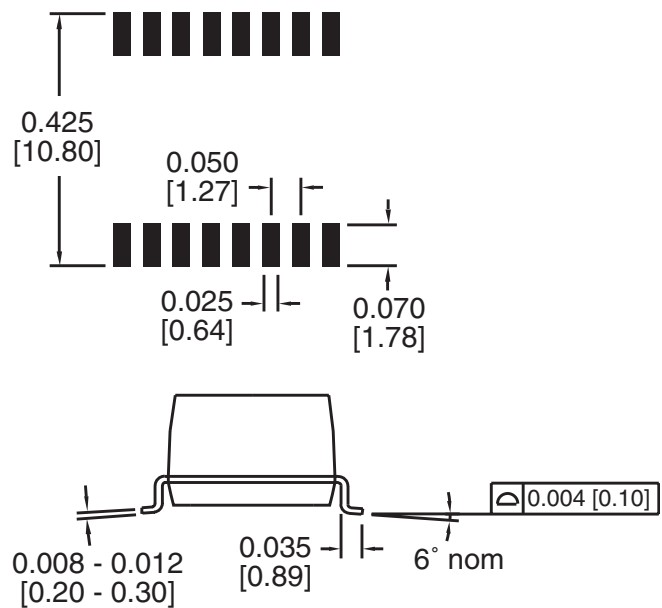
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MECHANICAL

S554-6500-29



Suggested PCB Pad Layout



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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