

# HIGH FREQUENCY MAGNETICS

## DS3/E3/STS-1 Transformers

TM02130

- Optimized for line transceivers operating at E3, DS3 or STS-1 rates: 34.368 Mb/s, 44.736 Mb/s, 51.84 Mb/s
- S554-6500-25 and S554-6500-26 are surface mount, industrial temperature replacements for S554-3184-00 and S554-3184-02 transformers respectively
- Meet 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

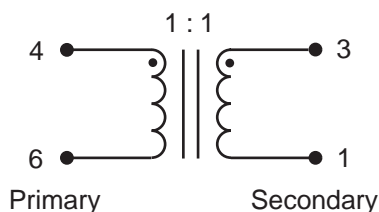
### ELECTRICAL SPECIFICATIONS at 25° C

Part Number	Turns Ratio ±2%	Primary Inductance at 100 kHz		Leakage Inductance at 1 MHz μH max	Capacitance C w/w pF max	Return Loss at 1.72 MHz 75Ω Application <sup>1</sup>	
		25° C μH min	-40° C μH min			25° C dB typ	-40 to +85° C dB min
S554-6500-25	1 : 1	80	40	0.09	10	25	18
S554-6500-26	1 : 2CT	80	40	0.09	10	25	18
S554-6500-30	1CT : 1CT	80	40	0.10	10	25	18

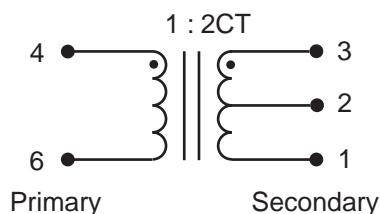
1. Terminated in 75 Ω for 1 : 1 ratio and 300 Ω for 1 : 2 ratio

### SCHEMATICS

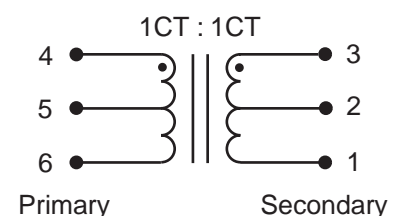
S554-6500-25



S554-6500-26

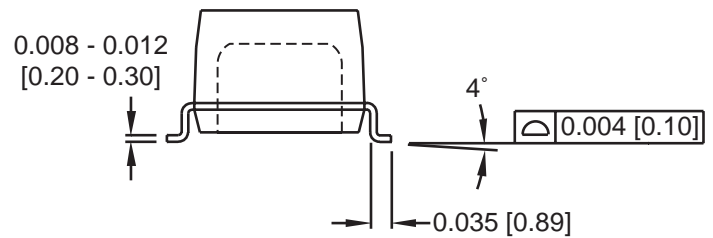
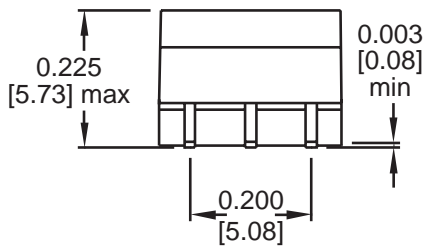
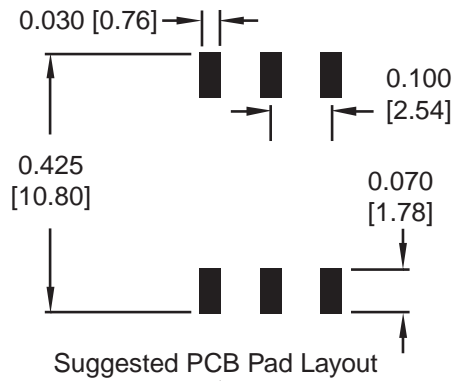
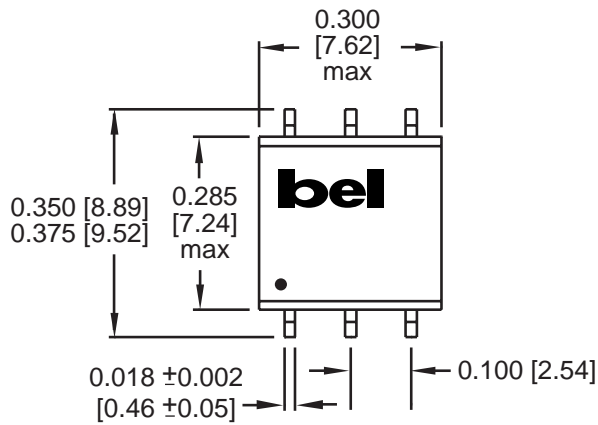


S554-6500-30



#### MECHANICAL

S554-6500-25  
S554-6500-26  
S554-6500-30



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

#### Tape and Reel Packaging

16 mm wide by 12 mm pitch; 13 inch OD, 4 inch ID  
500 modules per reel, maximum  
Meets ANSI/EIA 481-2 Carrier Tape Standards - JEDEC SO Package

#### CORPORATE

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