

HIGH FREQUENCY MAGNETICS

DS3/E3/STS-1 Dual Transformers

TM02129

- 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 transformer and receive transformer 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

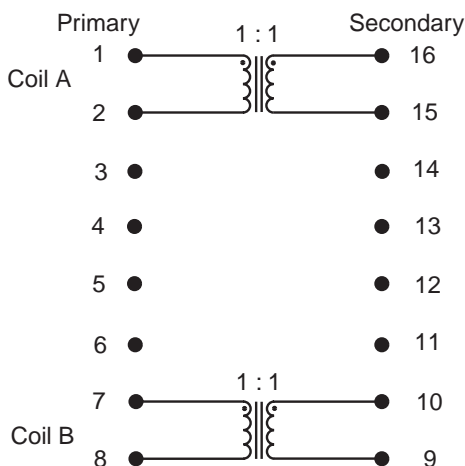
ELECTRICAL SPECIFICATIONS at 25° C

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			
	Pri : Sec		25° C µH min		-40° C µH min		µH max		pF max	25° C dB typ		-40 to +85° C dB min	
	Coil A	Coil B	Coil A	Coil B	Coil A	Coil B	Coil A	Coil B	Coil A & B	Coil A	Coil B	Coil A	Coil B
S554-6500-15	1 : 1	1 : 1	80	80	40	40	0.09	0.09	10	25	25	18	18
S554-6500-16	1 : 1	1CT : 1CT	80	80	40	40	0.09	0.10	10	25	25	18	18
S554-6500-17	1 : 2CT	1 : 1	80	80	40	40	0.09	0.09	10	25	25	18	18
S554-6500-18	1 : 1	1 : 2CT	80	80	40	40	0.09	0.09	10	25	25	18	18

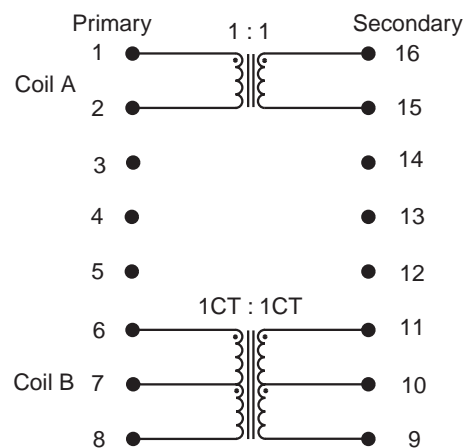
1. Terminated in 75 Ω for 1 : 1 ratios and 300 Ω for 1 : 2 ratios

SCHEMATICS

S554-6500-15



S554-6500-16





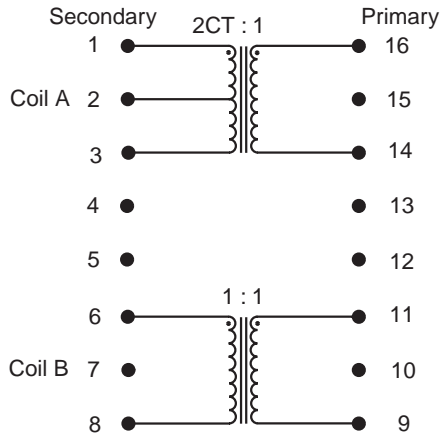
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DS3/E3/STS-1 Dual Transformers

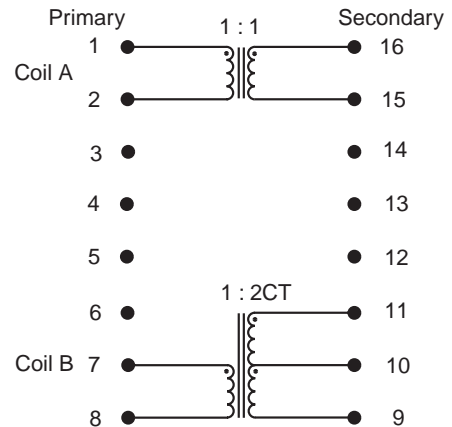
TM02129

SCHEMATICS

S554-6500-17

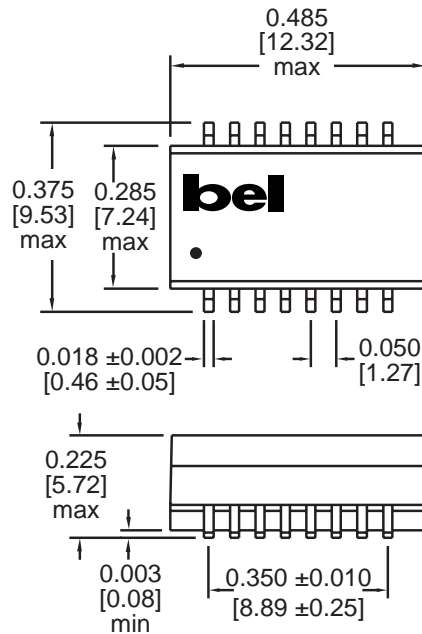


S554-6500-18

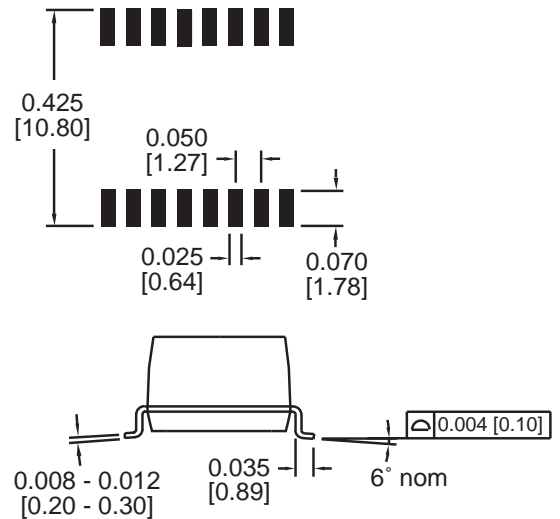


MECHANICAL

- S554-6500-15
- S554-6500-16
- S554-6500-17
- S554-6500-18



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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CORPORATE

Bel Fuse Inc.
 206 Van Vorst Street
 Jersey City, NJ 07302
 Tel 201-432-0463
 Fax 201-432-9542
 www.belfuse.com

FAR EAST

Bel Fuse Ltd.
 8F / 8 Luk Hop Street
 San Po Kong
 Kowloon, Hong Kong
 Tel 852-2328-5515
 Fax 852-2352-3706
 www.belfuse.com

EUROPE

Bel Fuse Europe Ltd.
 Preston Technology Management Centre
 Marsh Lane, Suite G7, Preston
 Lancashire, PR1 8UD, U.K.
 Tel 44-1772-556601
 Fax 44-1772-888366
 www.belfuse.com