



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# HIGH FREQUENCY MAGNETICS

## T1/E1 Octal Transformer Modules

TM01109

- Optimized for PMC-Sierra PM4354 Quad COMET
- Eight transformers in one surface-mount package
- Two modules:  
S553-6500-A7 with eight transformers  
S553-6500-A8 with eight transformers and IC-side surge protection devices
- Tight ratio tolerance assists impedance matching
- Meets ITU-T G.703 return loss from -40° to +85° C
- 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
- UL 1950 approved: S553-6500-A7 file number E150991  
S553-6500-A8 pending

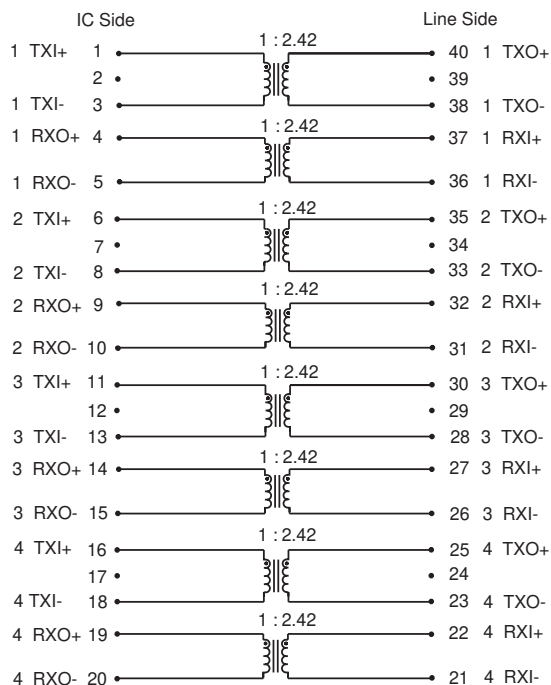
### ELECTRICAL SPECIFICATIONS at 25° C

Part Number	Turns Ratio ±2% IC : Line		Primary Inductance <sup>1</sup> µH min	Leakage Inductance <sup>1</sup> µH max	DCR Ω max		Interwinding Capacitance pF max	Return Loss at 102 kHz 120Ω Application <sup>2</sup>			
	TX	RX	IC Side	IC Side	IC Side	Line Side		25° C dB typ		-40 to +85° C dB min	
								TX	RX	TX	RX
S553-6500-A7	1 : 2.42	1 : 2.42	950	0.3	0.6	1.3	35	18	27	17	24
S553-6500-A8	1 : 2.42	1 : 2.42	950	0.3	0.6	1.3	35	18	27	17	24

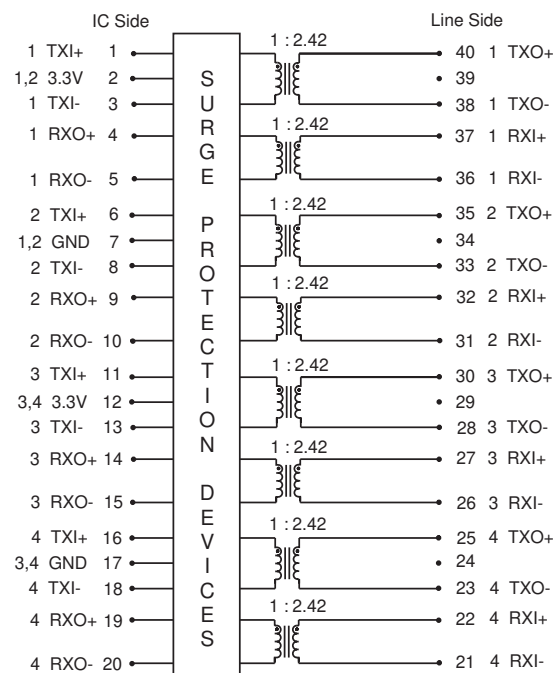
1. Inductance at 10 kHz, leakage inductance at 1 MHz
2. Terminated in 25.4 Ω for TX and 18.2 Ω for RX

### SCHEMATIC

S553-6500-A7



S553-6500-A8

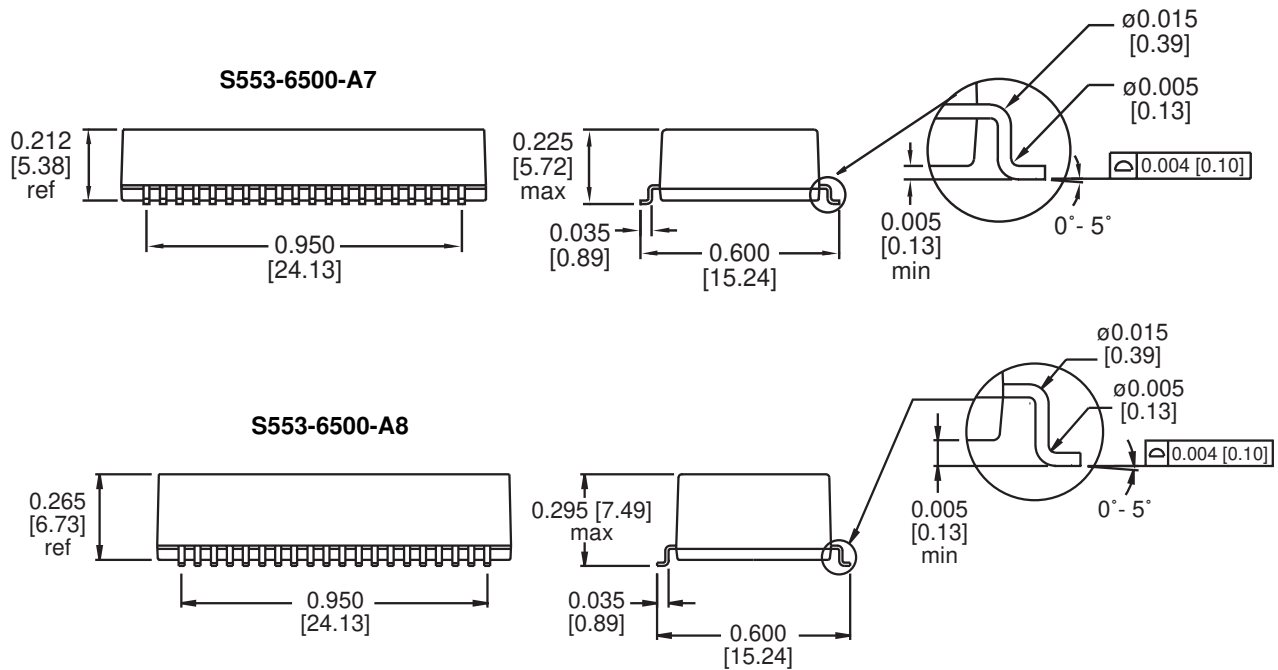
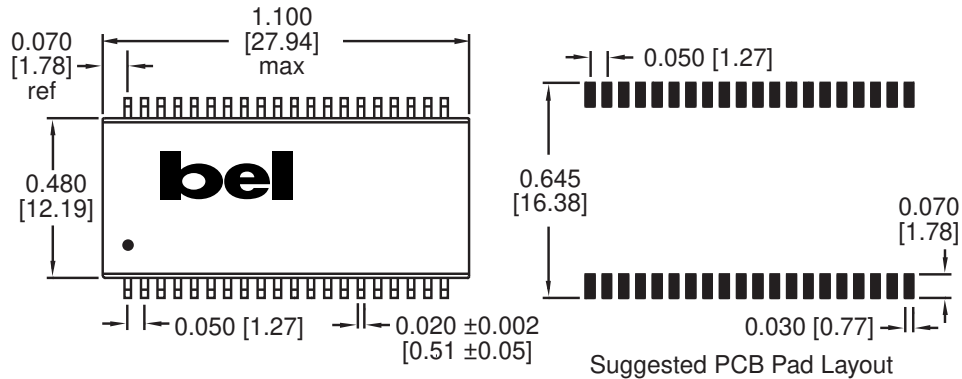


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TM01109

### MECHANICAL

S553-6500-A7  
S553-6500-A8



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

#### S553-6500-A8 Surge Protection Devices

TVS Diode Array: Protek PSRDA3.3-4  
Number of Arrays: 4

**Note:** Surge protection provided by the Bel module is equivalent to that advertised in the Protek PSRDA3.3-4 product specification.

#### 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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