

## ADSL Magnetics

For Analog Devices AD20MSP930

- Designed to meet IEC 950 safety requirements for supplementary insulation at 250V
- Minimum interwinding breakdown voltage of 1500 Vrms
- Complies with all of the requirements in the transformer specification generated by Analog Devices
- Operating temperature range: -40° C 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

### ELECTRICAL SPECIFICATIONS AT 25° C

Part Number	Application	Package	Turns Ratio ±2%	Inductance	Leakage Inductance µH max	DCR Ω max		Longitudinal Balance dB min	Insertion Loss dB max	Frequency Response dB	Harmonic Distortion dB max
			Chip : Line	Chip Side	Chip Side	Chip Side	Line Side	10 kHz - 1.1 MHz	300 kHz	30 kHz - 1.1 MHz	
S560-6600-F3	ADSL over ISDN - CO	SMD	1 : 1	100 µH ±7% <sup>1</sup>	4	1	1	46	0.5	± 0.5	-80 <sup>3</sup>
0560-6600-E4		THT									
S560-6600-F4	ADSL over ISDN - CPE	SMD	1 : 1.2	120 µH ±10% <sup>1</sup>	4	0.61	0.74	46	0.5	± 0.5	-80 <sup>3</sup>
0560-6600-E5		THT									
S560-6600-F5	ADSL over POTS - CO	SMD	1 : 1.1	2 mH ±10% <sup>2</sup>	8.5	1.7	1.8	46	0.5	± 0.5	-80 <sup>4</sup>
0560-6600-E6		THT									
S560-6600-F6	ADSL over POTS - CPE	SMD	1 : 1.1	1.2 mH ±10% <sup>2</sup>	10	1.25	1.4	46	0.5	± 0.5	-80 <sup>4</sup>
0560-6600-E7		THT									

All measurements are made with pins 2 and 3 connected and pins 8 and 9 connected

1. measured at 100 kHz, 1 Vac

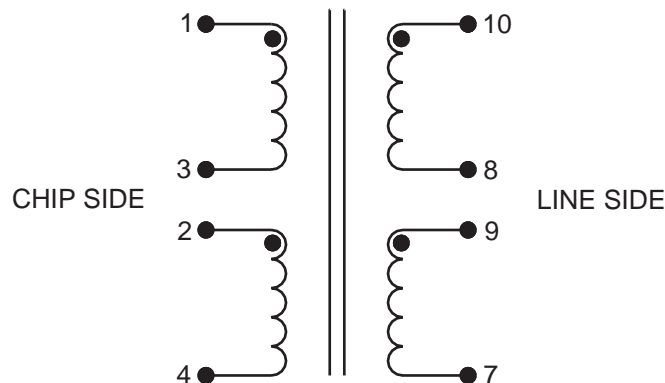
2. measured at 20 kHz, 1 Vac

3. measured with 100 Ω source at 100 kHz, 4 Vac

4. measured with 100 Ω source at 20 kHz, 4 Vac

### SCHEMATIC

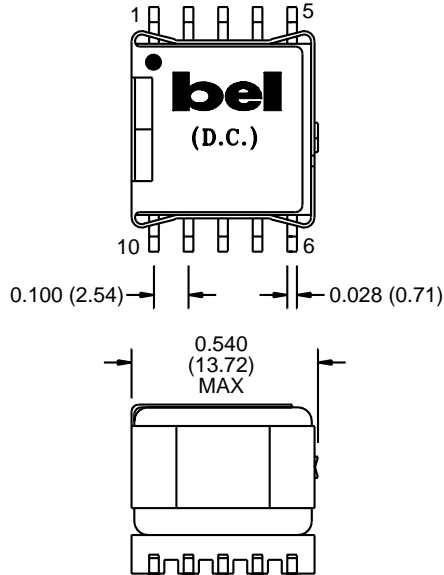
**S560-6600-F3**      **0560-6600-E4**  
**S560-6600-F4**      **0560-6600-E5**  
**S560-6600-F5**      **0560-6600-E6**  
**S560-6600-F6**      **0560-6600-E7**



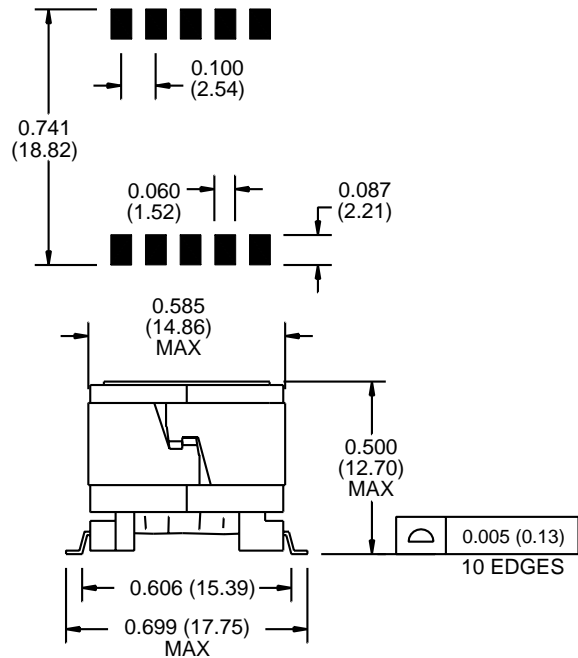
TM00305

### MECHANICAL

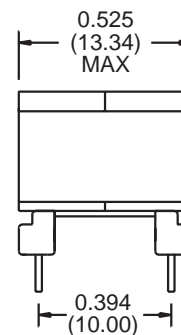
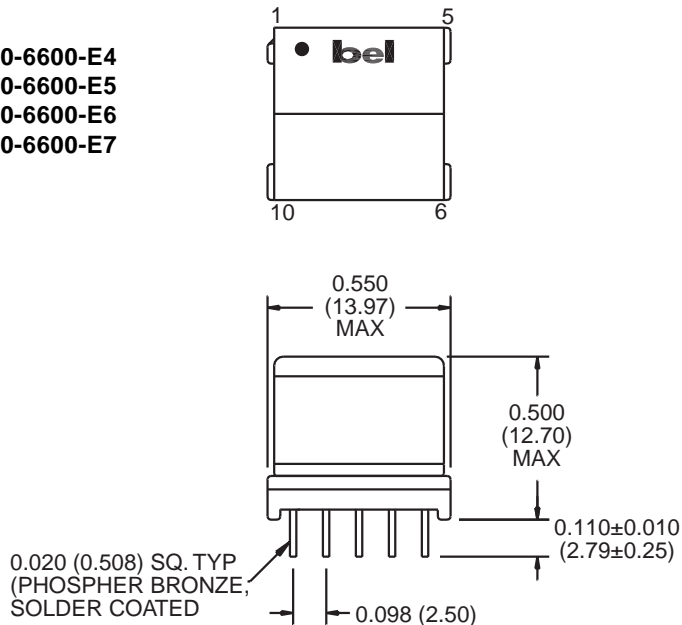
S560-6600-F3  
S560-6600-F4  
S560-6600-F5  
S560-6600-F6



### SUGGESTED PCB PAD LAYOUT



0560-6600-E4  
0560-6600-E5  
0560-6600-E6  
0560-6600-E7



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