

# HIGH FREQUENCY MAGNETICS

## Miniature Dual Turns Ratio Surface Mount Transformers

TM00145

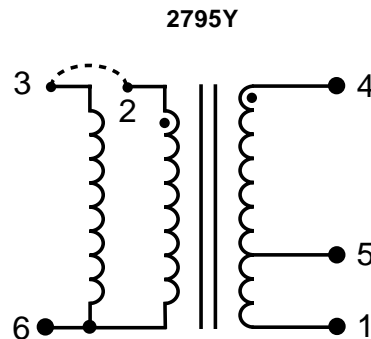
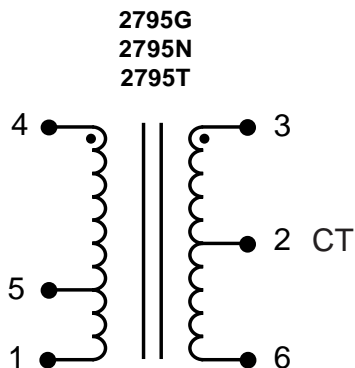
- Transformers provide a dual turns ratio for DS1, CEPT 75 and CEPT 120 line interface functions
- Maximum inductance unbalance of center-tapped winding is 0.2%
- Metallic surge voltage capability for 2795Y is 5000V peak
- Minimum interwinding breakdown voltage of 1500 Vrms
- Operating temperature range: -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
- For 2795T and 2795Y application note refer to document TM00145B
- For 2795N application note refer to document TM00145A

### ELECTRICAL SPECIFICATIONS at 25° C

Part Number	Turns Ratio ± 1%		Primary Inductance <sup>1</sup> mH min	Leakage Inductance <sup>2</sup> μH max		DCR Ω max			Interwinding Capacitance pF typ
	(4 - 1) : (3 - 6)	(4 - 5) : (3 - 6)		(4 - 1)	(4 - 1)	(4 - 5)	(4 - 5)	(4 - 1)	
2795G	1 : 1.14CT	1 : 1.35CT	1.8	---	0.8	1.8	2.2	2.5	35
2795N	1 : 1.070CT	1 : 1.353CT	1.7	0.6	0.5	1.7	2.2	2.3	36
2795T	1 : 1.89CT	1 : 2.40CT	1.3	0.6	0.45	1.4	1.8	3.3	47
Part Number	(3 - 6) : (4 - 5)	(3 - 6) : (4 - 1)		(3 - 6)	--	(4 - 5)	(4 - 1)	(3 - 6)	
2795Y	1 : 1.89	1 : 2.39	1.6	0.3	--	0.8	1.1	0.3	43

1. Measured at 10 kHz, 0.1 Vac  
2. Measured at 100 kHz, 0.1 Vac

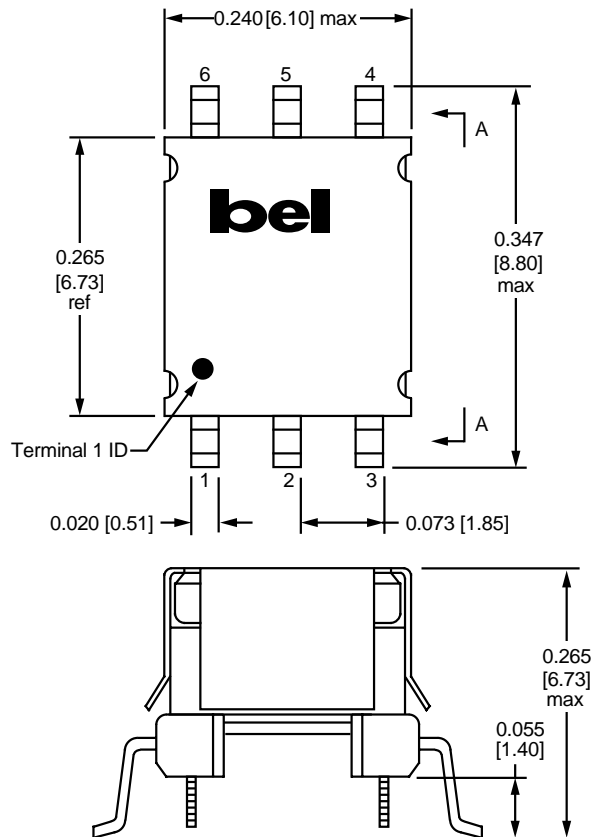
### SCHEMATICS



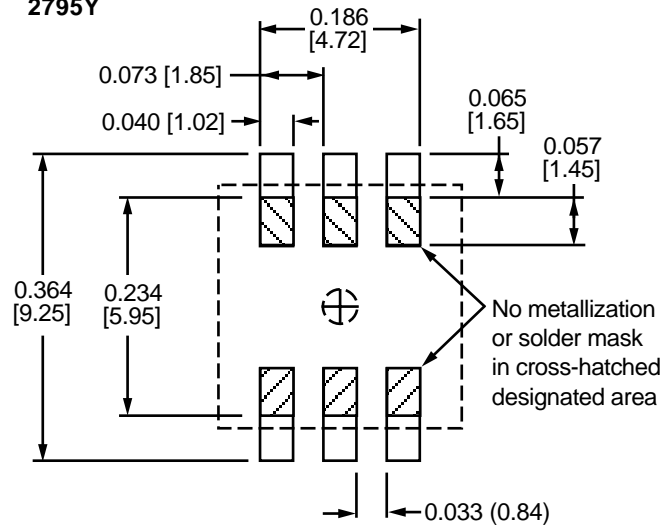
**Note:** Pins 2 and 3 must be connected externally.

TM00145

#### MECHANICAL



2795G  
2795N  
2795T  
2795Y



#### Suggested PCB Pad Layout

Note: Unless otherwise specified, dimensions are nominal and in inches [millimeters].

#### Supplementary Information

Operating Temperature Range	-40° C to +85° C
Safety Agency Compatibility	Underwriters Laboratories, Inc. UL 1459
Surge Voltage Capability	10/700 $\mu$ s; 10 repetitions of alternating polarity
Metallic Voltage	2500 V peak generator output, 25 $\Omega$ generator resistance
Longitudinal Voltage	2500 V peak generator output, 25 $\Omega$ generator resistance
Flammability Compliance	IEC-695, 2-2 (needle flame test), materials are UL 94 VO approved
Qualification Compliance	Bellcore TR-TSY-000357-1(shock, vibration, temperature cycling, temperature-humidity-bias)
Simulation Model	SPICE computer simulation file available on request
Surface-Mount Packaging	Tape and Reel; 16 mm wide by 12 mm pitch; 13 inch OD; 4 inch ID 650 transformers per reel, maximum Meets ANSI/EIA 481-2 Carrier Tape Standards—JEDEC SO package
Terminal Lead Coplanarity	0.004 inch [0.10 mm]
PWB Process Capability	Standard printed-wiring board assembly and cleaning techniques Standard solder reflow techniques Machine placement (recommendation: locate by terminals, not body)

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