

# HIGH FREQUENCY MAGNETICS

## T1/E1 Miniature Surface Mount Transformers

TM00142

- Meet pulse template and return loss requirements of T1/E1 interface circuits
- Minimum interwinding breakdown voltage of 1500 Vrms
- Maximum inductance unbalance of center-tapped windings is 0.2%
- 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

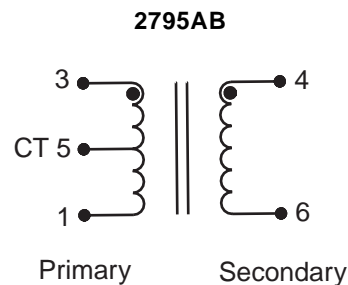
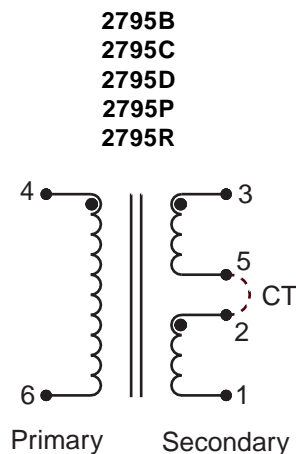
Part Number	Turns Ratio ± 1%	Primary Inductance <sup>1</sup> mH min	Leakage Inductance <sup>2</sup> μH max	DCR Ω max		Interwinding Capacitance pF typ	Surge Voltage Capability <sup>3</sup>	
	Pri : Sec			(4 - 6)	(3 - 1)		Metallic	Longitudinal
2795R	1 : 1CT	1.5	0.85	1.6	1.7	35	3000	2500
2795D	1 : 1.08CT	1.4	0.7	1.5	1.7	35	3000	2500
2795B	1 : 1.14CT	1.6	0.8	2.2	2.6	35	2500	2500
2795P	1 : 1.26CT	1.2	0.65	1.4	1.8	35	3000	2500
2795C	1 : 1.35CT	1.3	0.8	1.9	2.6	35	2500	2500
2795AB	1CT: 2	2.5	0.8	4.3	2.2	40	2500	2500

1. Measured at 10 kHz, 0.1 Vac

2. measured at 100 kHz, 0.1 Vac

3. See Supplementary Information

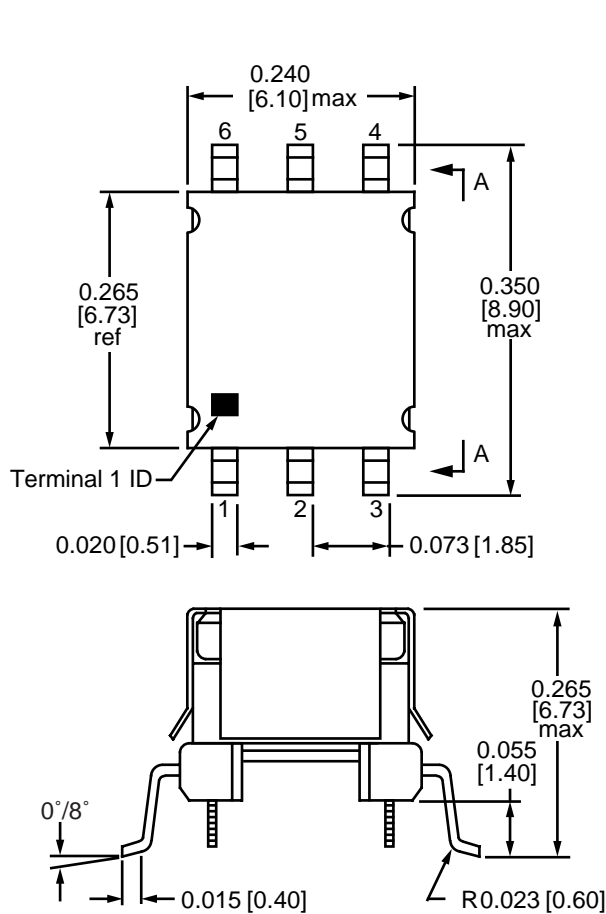
### SCHEMATICS



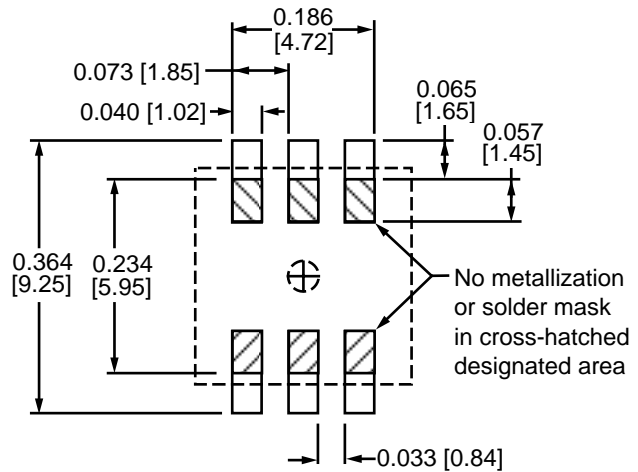
©2000 Bel Fuse Inc. Specifications subject to change without notice. 04.00

TM00142

#### MECHANICAL



2795AB  
 2795B  
 2795C  
 2795D  
 2795P  
 2795R



#### Suggested PCB Pad Layout

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

#### Supplementary Information

Safety Agency Compatibility	Underwriters Laboratories, Inc. UL 1950
Surge Voltage Capability	10/700 $\mu$ s; 10 repetitions of alternating polarity, generator output: peak voltage, 25 $\Omega$ source
Flammability Compliance	IEC-695, 2-2 (needle flame test), materials are UL 94 VO approved
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	Machine placement (recommendation: locate by terminals, not body)

©2000 Bel Fuse Inc. Specifications subject to change without notice. 04.00

#### CORPORATE

**Bel Fuse Inc.**  
 198 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