



# SMT Power Transformer

For Analog Devices ADM2482E and ADM2487E RS-485 Transceivers



- Designed specifically for use with Analog Devices ADM2482E and ADM2487E High Speed, Isolated RS-485 Transceivers with Integrated Transformer Driver
- Center tapped primary and secondary
- 2500 Vrms primary to secondary isolation

**Core material** Ferrite

**Terminations** RoHS compliant tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

**Weight** 1.0 g

**Ambient temperature** -40°C to +125°C

**Storage temperature** Component: -40°C to +125°C.

Tape and reel packaging: -40°C to +80°C

**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging** 600 per 13" reel; Plastic tape: 24 mm wide, 0.37 mm thick, 16 mm pocket spacing, 6.1 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	Pri/sec voltage	Inductance <sup>2</sup> min (µH)	DCR max (Ohms) <sup>3</sup>		Leakage inductance <sup>4</sup> max (µH)	Volt-time product <sup>5</sup> (V-µsec)	Power <sup>6</sup> (W)	Turns ratio pri : sec
			1/2 pri	1/2 sec				
GA3157-AL_	5 V to 3.3 V	45.6	0.130	0.155	1.14	34.4	7.2	1 : 0.88

1. When ordering, please specify **termination** and **packaging** codes:

**GA3157-ALD**

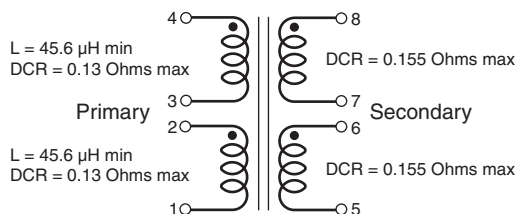
**Termination:** L = RoHS compliant tin-silver over tin over nickel over phos bronze.

**Special order:** T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

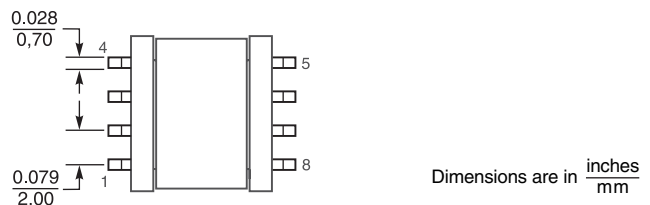
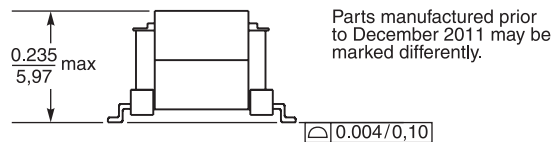
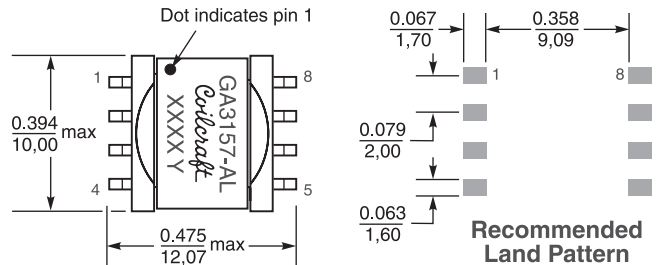
**Packaging:** D = 13" machine ready reel. EIA-481 embossed plastic tape (600 per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance is tested between pins 4 and 3 at 500 kHz, 0.5 Vrms, 0 Adc.
  - DCR is for each half of the primary and secondary.
  - Leakage inductance is for the primary with both windings connected in series and with the secondary windings shorted.
  - Based on Bs<sub>at</sub> of the core at 25°C and number of turns on winding 4-3.
  - Calculated output power based on 150 kHz operating frequency. Power varies depending on application.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Primary windings and secondary windings to be connected in series on the PC board.



**US** +1-847-639-6400 sales@coilcraft.com  
**UK** +44-1236-730595 sales@coilcraft-europe.com  
**Taiwan** +886-2-2264 3646 sales@coilcraft.com.tw  
**China** +86-21-6218 8074 sales@coilcraft.com.cn  
**Singapore** +65-6484 8412 sales@coilcraft.com.sg

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