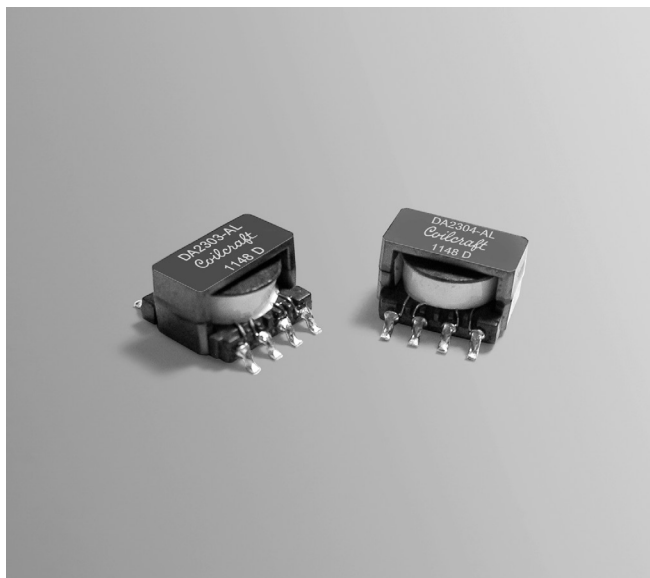


# SMT Power Transformers

For Analog Devices Isolated  
RS-485 Transceivers



- Developed for Analog Devices ADM2482E, ADM2485 and ADM2487E RS-485 Transceivers for stepping up 5 V or 3.3 V to 6 V.
- Center tapped primary and secondary windings
- 2500 Vrms, one minute interwinding isolation.

**Core material** Ferrite

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

**Weight** 0.94 – 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** 600/13" reel Plastic tape: 24 mm wide, 0.37 mm thick, 16 mm pocket spacing, 6.1 mm pocket depth

**PCB washing** Tested with pure water or alcohol only. For other solvents, 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
			pri	sec				
DA2303-AL_	5 V to 6 V	45.6	0.130	0.260	1.0	34.4	7.2	1 : 1.5
DA2304-AL_	3.3 V to 6 V	17.8	0.086	0.232	0.43	21.5	7.2	1 : 2.2

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

**DA2303-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.

2. Inductance is tested between pins 4 and 3 at 500 kHz, 0.5 Vrms, 0 A dc.

3. DCR is per winding.

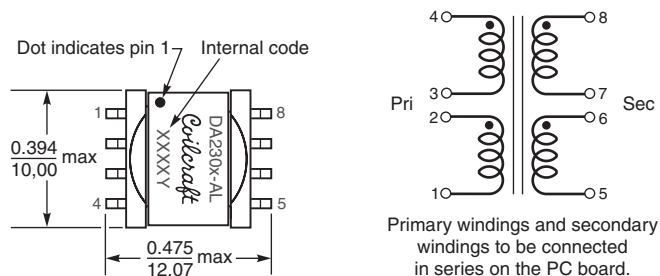
4. Leakage inductance is for the primary with both windings connected in series and with the secondary windings shorted.

5. Volt-time product is based on a flux density of 2500 gauss, measured between pins 4 and 1 with pins 2 and 3 connected.

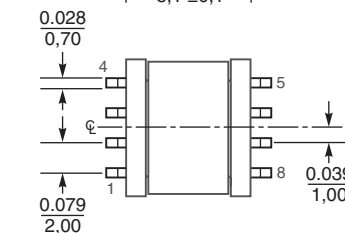
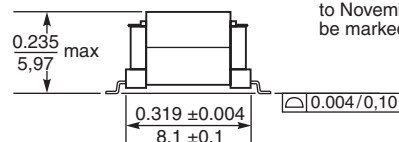
6. Calculated output power based on 150 kHz operating frequency. Power varies depending on application.

7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Parts manufactured prior to November 2011 may be marked differently.



Dimensions are in inches  
mm