



# Flyback Transformer

For Texas Instruments  
LM5000 DC/DC Regulator



This surface mount flyback transformer is designed for use with Texas Instruments LM5000 DC/DC regulator. The core completely encloses the windings to minimize EMI interference. The transformer features very low DCR, 500 Vrms isolation and a leakage inductance rating of just 1.0  $\mu$ H. Coilcraft can also custom engineer a transformer to meet your specific requirements.

For free evaluation samples, contact Coilcraft or order them on-line at [www.coilcraft.com](http://www.coilcraft.com).

Part number <sup>1</sup>	Inductance <sup>2</sup> $\pm 20\%$ ( $\mu$ H)		Input voltage (V)	Output	DCR max (Ohms)	Leakage Inductance <sup>3</sup> max ( $\mu$ H)	Turns ratio in:out:aux	Isolation <sup>4</sup> (Vrms)
	Pins 1 – 4	Pins 2 – 3						
A0009-AL_	100	100	18 – 55	3.3 V @ 3 A	0.150 (1 – 4) 0.150 (2 – 3) 0.012 (5,6 – 7,8)	1.0	1 : 0.33 : 1	500

1. When ordering, please specify a **packaging** code:

**A0009-ALD**

**Packaging:** **D** = 13" machine ready reel. EIA-481 embossed plastic tape (150 per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

**B** = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

- Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc.
- Leakage inductance measured at 100 kHz, 0.1 Vrms from pins 1 to 4 with all other pins shorted.
- Isolation measured from pin 1 to pins 5 and 6; from 2 to 5 and 6; and from pins 1, 2, 5 and 6 to the core for one minute.
- Electrical specifications at 25°C.

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

**Core material** Ferrite

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

**Weight** 7.86 g

**Ambient temperature**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

**Storage temperature** Component:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .  
Tape and reel packaging:  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$

**Resistance to soldering heat** Max three 40 second reflows at  $+260^{\circ}\text{C}$ , parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 85% relative humidity)

**Packaging** 150 per 13" reel Plastic tape: 44 mm wide, 0.5 mm thick, 28 mm pocket spacing, 13.8 mm pocket depth

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



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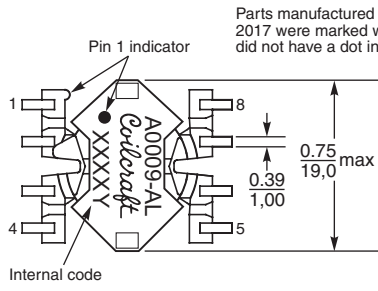
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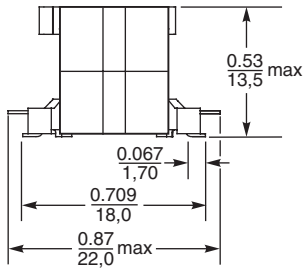
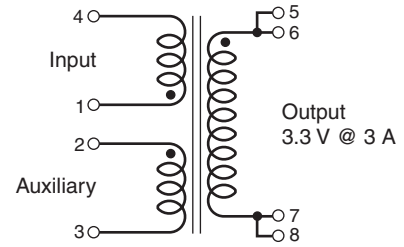
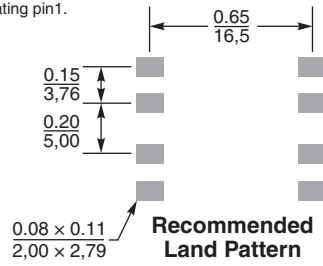
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# A0009-AL Flyback Transformer



Parts manufactured prior to February 2017 were marked with a label and did not have a dot indicating pin 1.



Dimensions are in  $\frac{\text{inches}}{\text{mm}}$