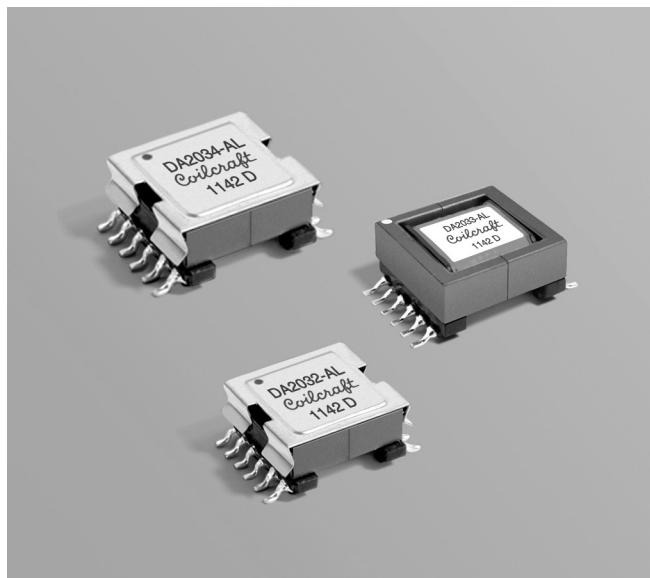




# Flyback Transformers

For Linear Technology LT3750/LT3751  
Capacitor Charger Controllers



These surface mount flyback transformers were developed for use with Linear Technology LT3750 Capacitor Charger Controller. DA2033-AL and DA2034-AL are also specified for the LT3751 Controller. They have a smaller footprint than other transformers designed for this application.

These low-profile transformers feature 1500 Vrms, one minute winding to winding isolation and 750 Vrms winding to core isolation. They are designed to operate with an input range of 3 – 24 V and to charge a capacitor to 300 V.

They are shown on the Linear Technology LT3750 application note for use in a 300 V, 3 A charging circuit (DA2032); a 300 V, 6 A charging circuit (DA2033); and a 300 V, 9 A charging circuit (DA2034).

Coilcraft can also custom engineer a transformer to meet your specific requirements. For free evaluation samples, contact Coilcraft or visit [www.coilcraft.com](http://www.coilcraft.com).

| Part number <sup>1</sup> | Inductance at 0 A <sup>2</sup><br>±10% (μH) | Inductance at I <sub>pk</sub> <sup>3</sup><br>min (μH) | DCR max (Ohms)<br>pri <sup>4</sup> sec | Leakage inductance <sup>5</sup><br>max (μH) | I <sub>pk</sub> <sup>3</sup><br>(A) | Interwinding capacitance <sup>6</sup><br>(pF) | Turns ratio<br>pri : sec |
|--------------------------|---|--|--|---|-------------------------------------|---|--------------------------|
| DA2032-AL_               | 10.0  | 9.0  | 0.013 1.60                             | 0.150                                       | 3.0                                 | 67  | 1 : 10                   |
| DA2033-AL_               | 10.0  | 9.0  | 0.015 1.10                             | 0.144                                       | 5.0                                 | 76  | 1 : 10                   |
| DA2034-AL_               | 10.0  | 9.0  | 0.018 1.75                             | 0.250                                       | 10.0                                | 128   | 1 : 10                   |

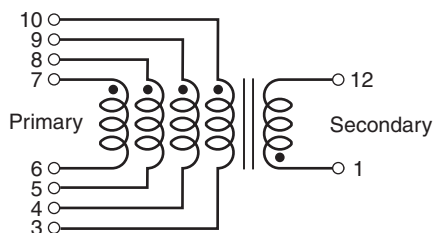
1. When ordering, please specify **packaging** code:

#### DA2034-ALD

**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (DA2032-AL & DA2033-AL: 200 parts per full reel; DA2034-AL: 175 parts 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 is for the primary, measured at 100 kHz, 0.1 Vrms, 0 Adc.
- Peak primary current drawn at minimum input voltage.
- DCR is with the primary windings connected in parallel.
- Leakage inductance is with the primary windings connected in parallel and with the secondary winding shorted.
- Capacitance measured at 100 kHz, 0.1 Vrms from pin 3 to pin 1 with all other pins shorted.
- Electrical specifications at 25°C.



Primary windings to be connected in parallel on PC board

**Core material** Ferrite

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

**Weight** DA2032: 5.9 g; DA2033: 8.2 g; DA2034: 14.1 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)

#### Packaging

**DA2032-AL** 200 per 13" reel. Plastic tape: 44 mm wide, 0.4 mm thick, 28 mm pocket spacing, 9.6 mm pocket depth

**DA2033-AL** 200 per 13" reel. Plastic tape: 44 mm wide, 0.4 mm thick, 24 mm pocket spacing, 10.56 mm pocket depth

**DA2034-AL** 175 per 13" reel. Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf.



[www.coilcraft.com](http://www.coilcraft.com)

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

Document 510-1 Revised 11/18/21

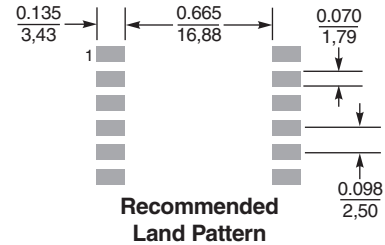
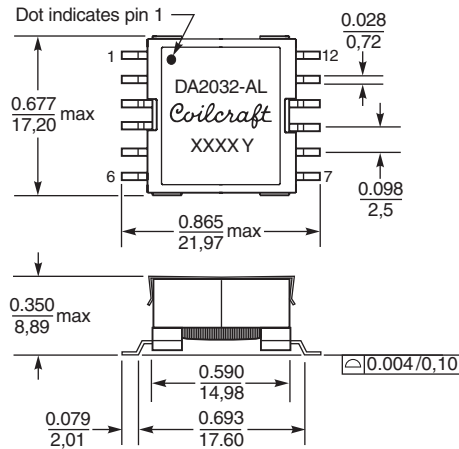
© Coilcraft Inc. 2021

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

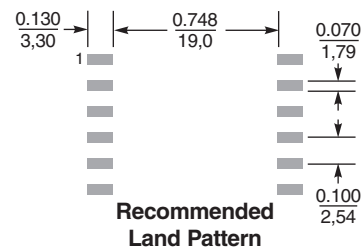
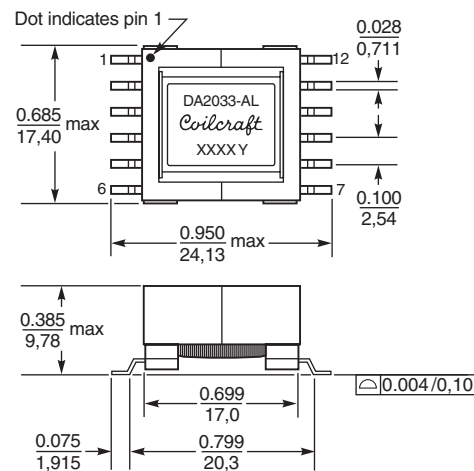


# Flyback Transformers for Linear LT3750

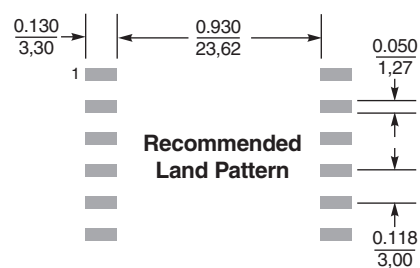
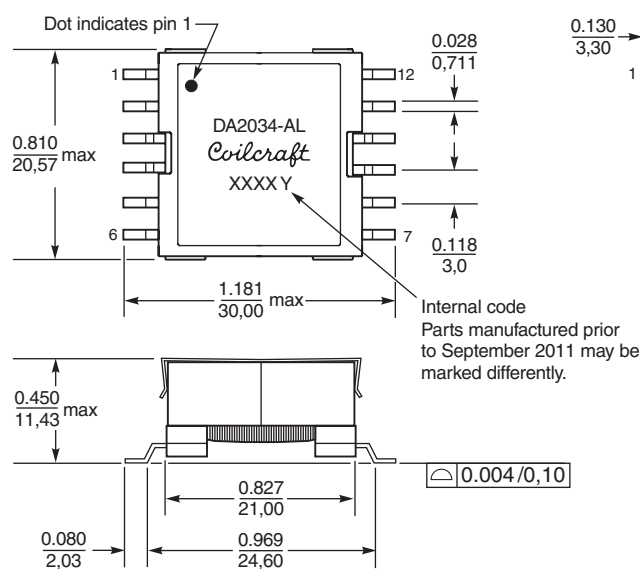
## DA2032-AL



## DA2033-AL



## DA2034-AL



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