



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.

Part number ¹	Inductance at 0A ² ±10% (µH)	Inductance at I _{pk} ³ min (µH)	DCR max (Ohms)		Leakage inductance ⁵ max (µH)	I _{pk} ³ (A)	Interwinding capacitance ⁶ (pF)	Turns ratio pri : sec
			pri ⁴	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

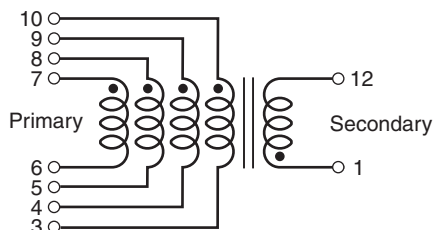
1. When ordering, please specify **packaging** code:

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).

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 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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

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.



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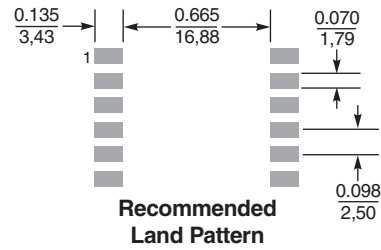
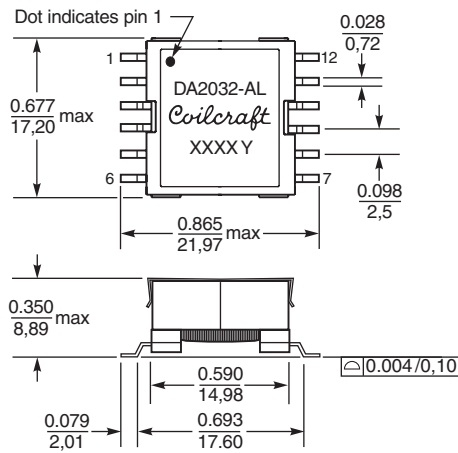
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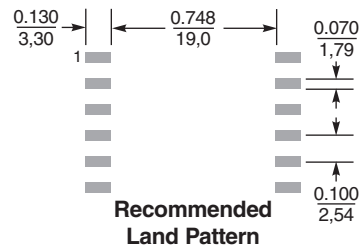
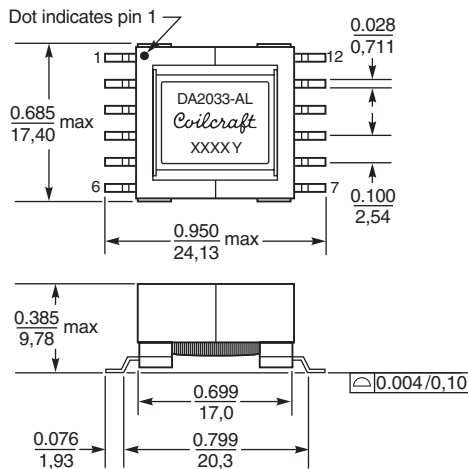


Flyback Transformers for Linear LT3750

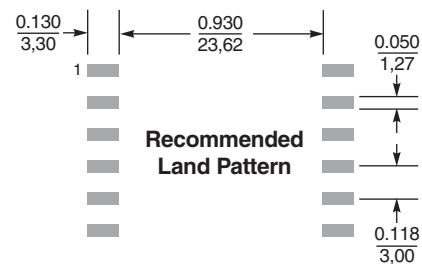
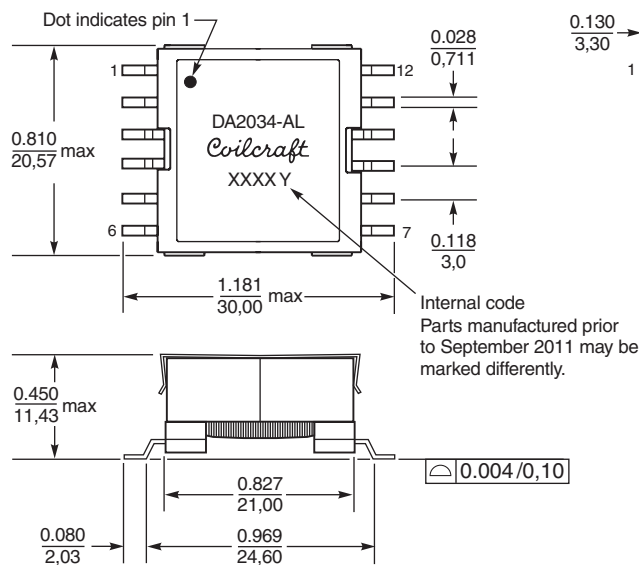
DA2032-AL



DA2033-AL



DA2034-AL



Dimensions are in inches
mm



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