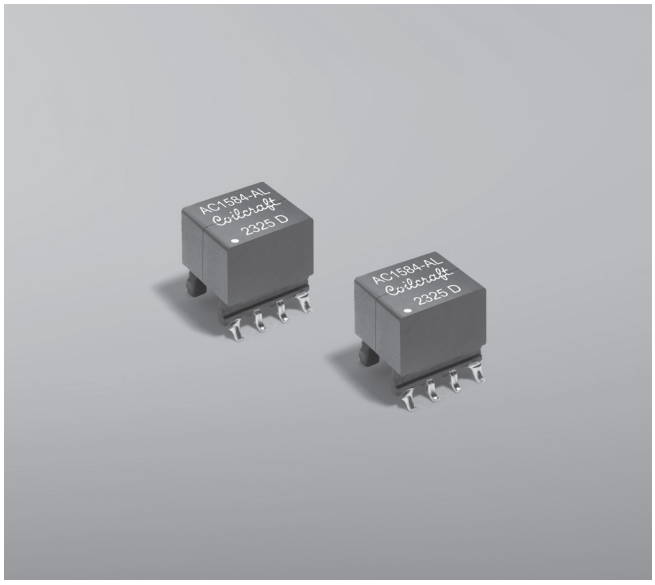
No-Opto Flyback Transformer AC1584-AL



- Optimized for MP8017 Active clamp Flyback converter for Monolithic Power.
- Designed to meet IEEE802.3af standard for 13 W POE PD converters and operates with 37 – 57 V input
- 1500 Vrms, one minute isolation (hipot) between primary and secondary

Core material Ferrite

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

Weight 2.1 g

Ambient temperature –40°C to +85°C

Max Part Temperature +125°C (ambient + temperature rise)

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 300 per 13″ reel Plastic tape: 32 mm wide, 0.5 mm thick, 20 mm pocket spacing, 10.69 mm pocket depth

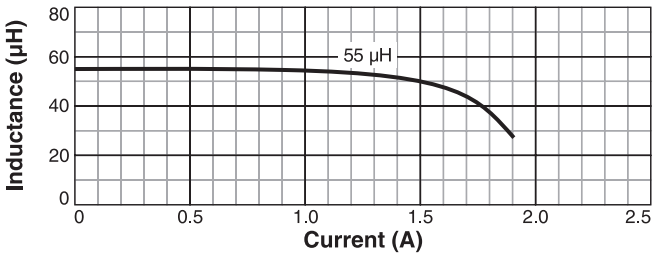
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

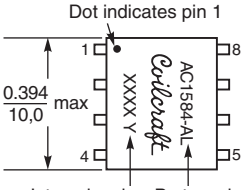
Part number[1]	Inductance at 0 A[2] ±10% (µH)	Isat[3] (A)	DCR max (Ohms) pri	sec1	sec2	Leakage inductance max (µH)[4]	Turns ratio pri : sec1 : sec2	Isolation[5] (Vrms)	Power (W)	Output
AC1584-ALD	55	1.8	0.195	0.024	0.018	1.25	1 : 0.208 : 0.208	1500	13	5 V, 2.4 A

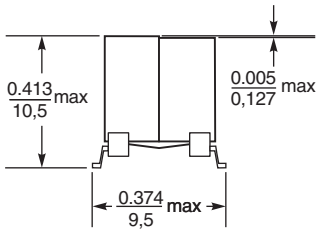
1. **Packaging:** **D** = 13″ machine-ready reel. EIA-481 embossed plastic tape (300 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
2. Inductance is for the primary, measured at 100 kHz, 0.1 Vrms, 0 Adc.
3. DC current that causes the primary inductance drop 30% from its value without current.
4. Leakage inductance is for the primary winding with the secondary windings shorted.
5. 1500 Vrms, one minute isolation (hipot) between primary and secondary.
6. Electrical specifications at 25°C.

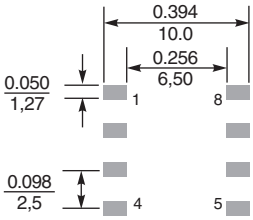
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

L vs Current

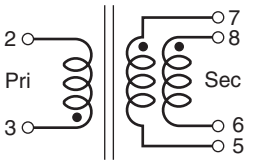








Recommended Land Pattern



Connect pin 5 to 6, pin 7 to 8 on the PC board.

Dimensions are in inches / mm

Coilcraft
www.coilcraft.com

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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