











## No-Opto Flyback Transformers

- Optimized for MAX17690 No-Opto Isolated Flyback Controllers for Analog Devices
   The Analog Devices
   The Analog Devices
- Designed for 125 150 kHz with 10 28 V or 20 56 V input voltage
- 1500 Vrms, one minute isolation (hipot) between primary and secondary windings



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

**Weight** 0.90 - 1.0 g

**Max part temperature** +125°C (including temp 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  $<30^{\circ}$ C / 85% relative humidity)

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

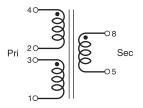
**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf

Part	Inductance at 0 A <sup>2</sup>	Isat <sup>3</sup>	DCR max (Ohms)		Leakage inductance	Turns ratio	Isolation <sup>5</sup>	
number <sup>1</sup>	±10% (µH)	(A)	pri	sec	max (µH) <sup>4</sup>	pri : sec	(Vrms)	Output
10 – 28 V input								
ZC1493-AED	16.45 @ 125 KHz	2.4	0.077	0.026	0.296	1:0.419	1500	5 V, 1.47 A
ZC1495-AED	16.45 @ 125 KHz	2.4	0.088	0.177	0.24	1:1	1500	12 V, 0.66 A
ZC1610-AED	16.45 @ 150 KHz	2.4	0.088	0.500	0.24	1:1.75	1500	24 V, 0.20 A
20 – 56 V input								
ZC1494-AED	65.78 @ 130 KHz	1.5	0.396	0.036	1.2	1:0.218	1500	5 V, 1.47 A
ZC1496-AED	65.78 @ 130 KHz	1.5	0.396	0.178	1.2	1:0.502	1500	12 V, 0.66 A
ZC1658-AED	65.80 @ 150 KHz	1.5	0.396	0.570	1.2	1:0.857	1500	24 V, 0.20 A

- Packaging: D = 13" machine-ready reel. EIA-481 embossed plastic tape (600 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 0.1 Vrms, 0 Adc.
- 3. DC current that causes the primary inductance drop 30% from its value without current. Click for temperature derating information.
- Leakage Inductance is for the primary, measured with secondary windings shorted together.
   1500 V/ms, and minute isolation (hinet) between primary and secondary.
- 1500 Vrms, one minute isolation (hipot) between primary and secondary windings.
- 6. Electrical specifications at 25°C.

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

## **Schematics**



Connect pins 4, 3 and 2, 1 on the PC board.



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This product may not be used in medical or high risk applications without prior Coilcraft approval

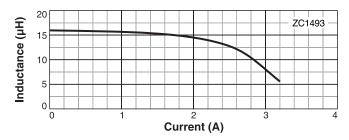
risk applications without prior Coilcraft approval Specification subject to change without notice Please check web site for latest information

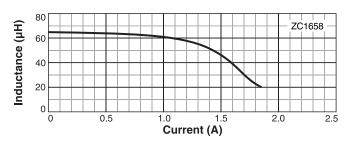


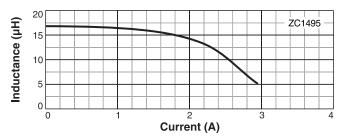
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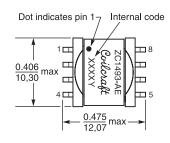
## L vs Current



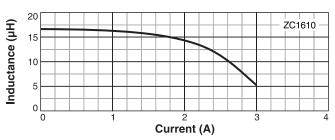


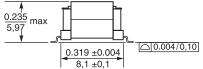


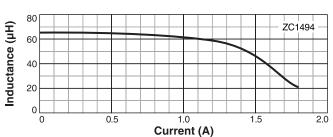


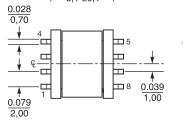


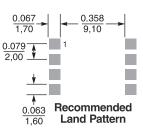
**Dimensions** 











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

