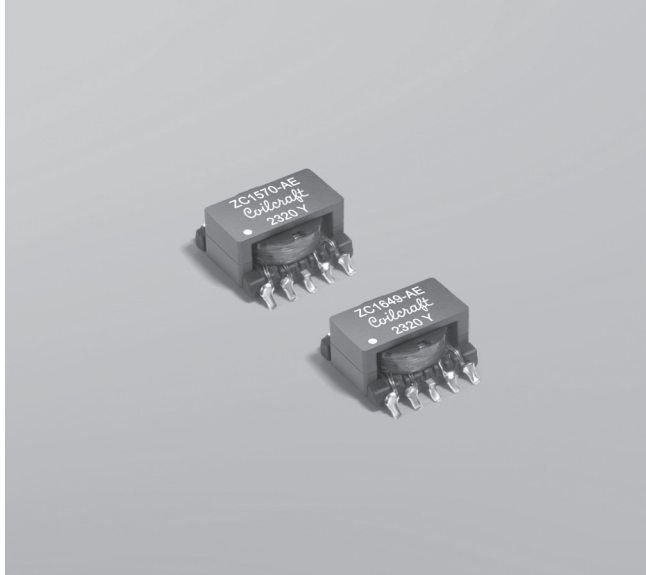




No-Opto Flyback Transformers



- Optimized for MAX17690 No-Opto Isolated Flyback Controllers for Analog Devices
- Designed for 125–170 kHz with 10–28 V or 20–56 V input voltage
- 1500 Vrms, one minute isolation (hipot) between primary and secondary windings

Core material Ferrite

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

Weight 1.5 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°C / 85% relative humidity)

Packaging 500/13" reel Plastic tape: 24 mm wide, 0.36 mm thick, 16 mm pocket spacing, 6.13 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

Part number ¹	Inductance at 0 A ² ±10% (μH)	Isat ³ (A)	DCR max (Ohms)		Leakage inductance max (μH) ⁴	Turns ratio pri : sec	Isolation ⁵ (Vrms)	Output
			pri	sec				
10 – 28 V input								
ZC1570-AED	7.85 @ 130 KHz	4.8	0.036	0.0072	0.20	1 : 0.375	1500	5 V, 1.2 A
ZC1642-AED	7.85 @ 170 KHz	4.7	0.035	0.049	0.20	1 : 0.875	1500	12 V, 0.72 A
ZC1645-AED	7.85 @ 170 KHz	4.5	0.032	0.190	0.20	1 : 1.75	1500	24 V, 0.36 A
20 – 56 V input								
ZC1641-AED	31.40 @ 125 KHz	2.3	0.140	0.0072	0.74	1 : 0.1875	1500	5 V, 1.2 A
ZC1644-AED	31.40 @ 170 KHz	2.3	0.137	0.048	0.74	1 : 0.4375	1500	12 V, 0.72 A
ZC1649-AED	31.40 @ 170 KHz	2.3	0.130	0.180	0.60	1 : 0.875	1500	24 V, 0.36 A

1. **Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (500 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.

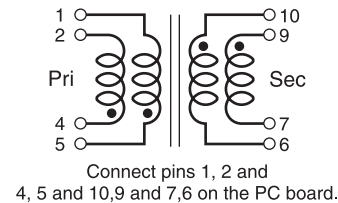
4. Leakage Inductance is for the primary, measured with secondary windings shorted together.

5. 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.

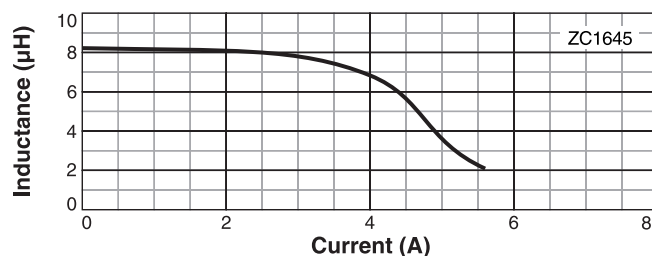
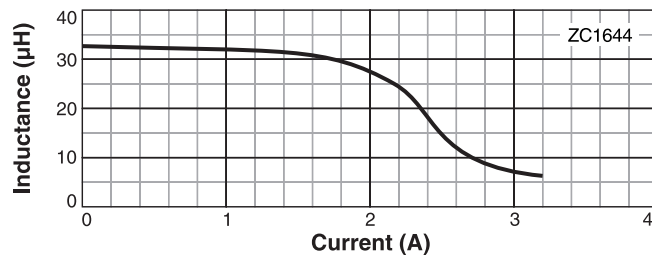
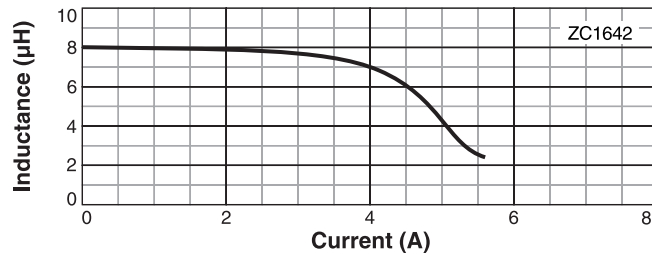
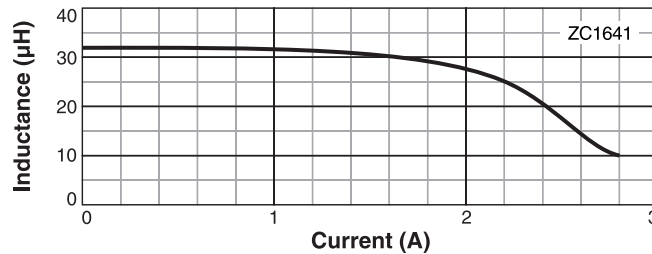
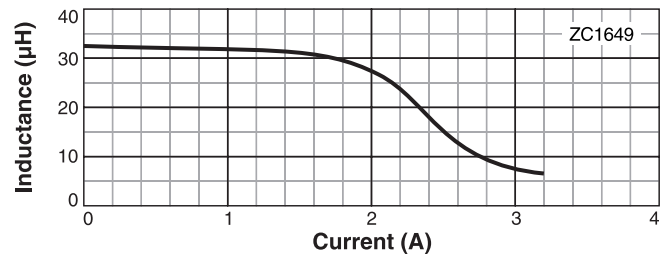
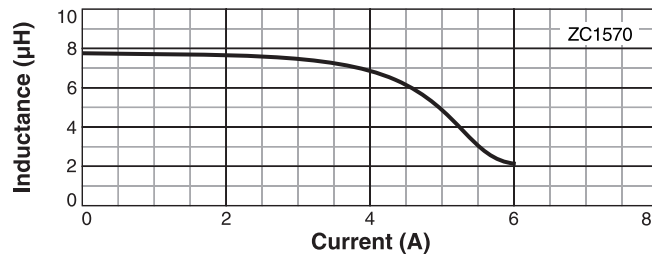
Schematics



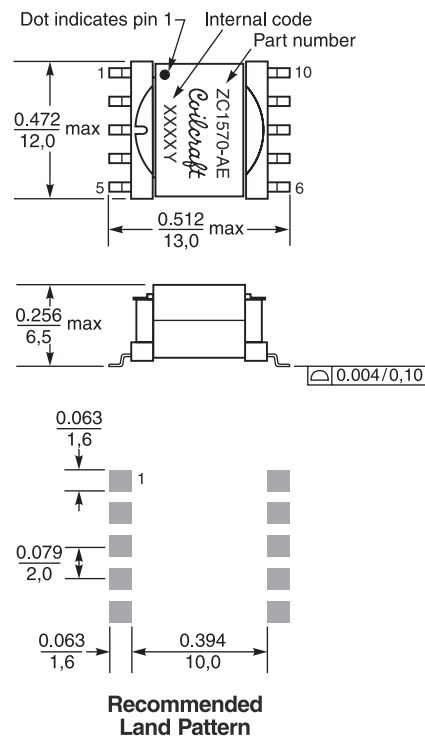


No-opto Flyback Transformers

L vs Current



Dimensions



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