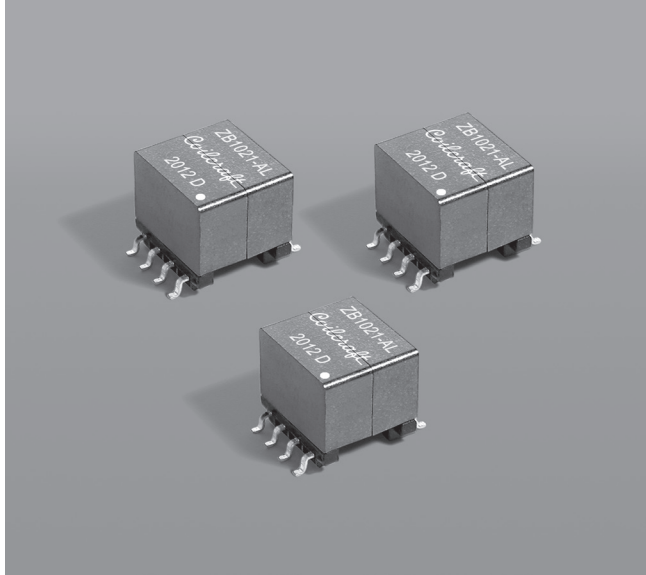




Flyback Transformer ZB1021-AL



- Design application for MAXIM17691A evaluation kit
- Discontinuous conduction mode flyback transformer
- Designed to operate at 150 kHz with 17 – 36 V input
- 1500 Vrms, one minute isolation 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 3.85 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)

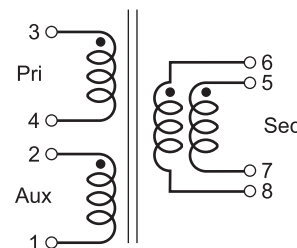
Packaging 200/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 11.2 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	L at 0 A ² ±10% (µH)	Isat ³ (A)	Leakage inductance max (µH) ⁴	DCR max (Ohms)			Turns ratio pri : sec : aux	Isolation ⁵ (Vrms)	Power (W)	Output
				Pri	Sec	Aux				
ZB1021-ALD	22	3.4	0.25	0.068	0.018	0.288	1 : 0.33 : 0.5	1500	7.5	5 V, 1.5 A

- Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (200 parts per reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
 - Inductance is for the primary, measured at 150 kHz, 0.1 Vrms, 0 Adc.
 - 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 Vrms, one minute isolation (hipot) from primary to secondary.
 - Auxiliary winding 8 V, 0.005 A.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Schematic



Connect pin 5 to 6 and pin 7 to 8 on the PC board



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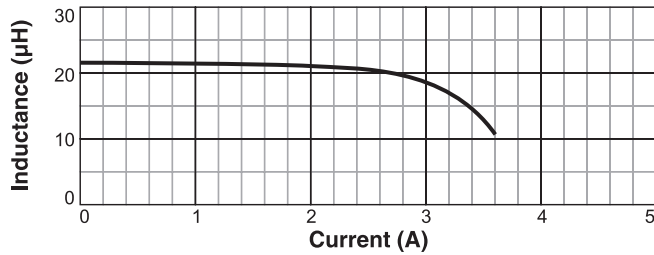
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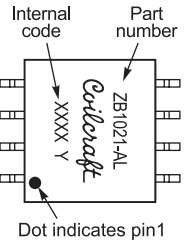
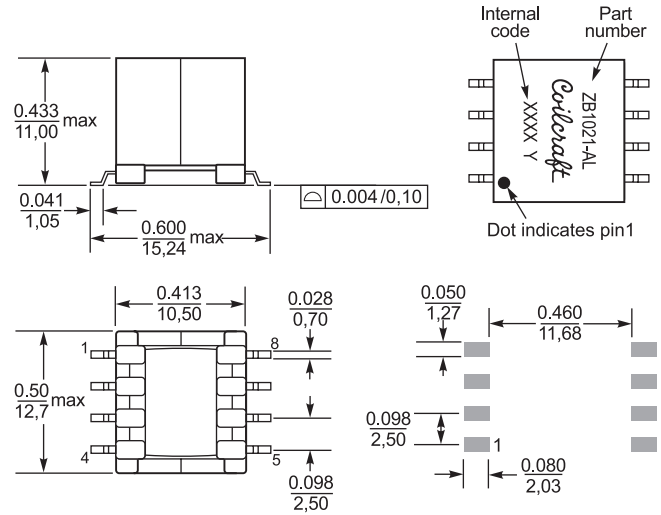


Flyback Transformer – ZB1021-AL

Typical L vs Current



Dimensions



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

Recommended Land Pattern



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