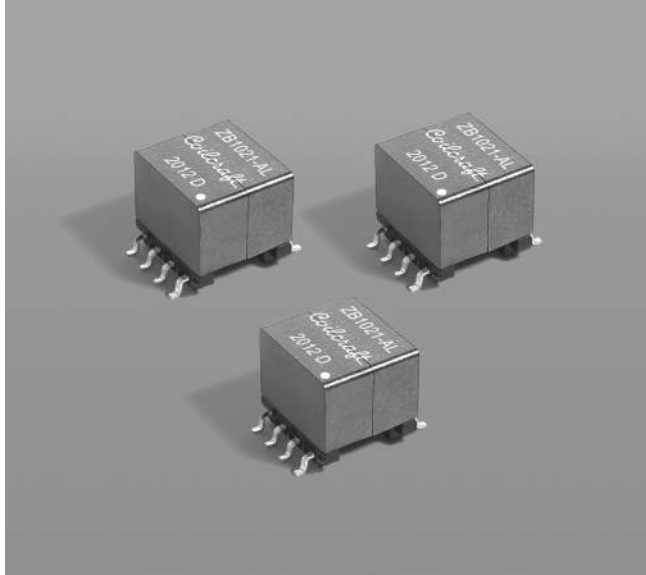


# Flyback Transformer ZB1021-AL



- 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)

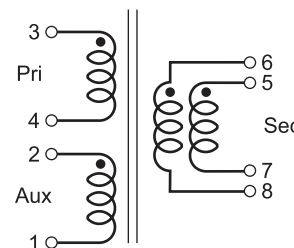
**Packaging** 200/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 11.2 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	L at 0 A <sup>2</sup> ±10% (µH)	Isat <sup>3</sup> (A)	Leakage inductance max (µH) <sup>4</sup>	DCR max (Ohms)			Turns ratio pri : sec : aux	Isolation <sup>5</sup> (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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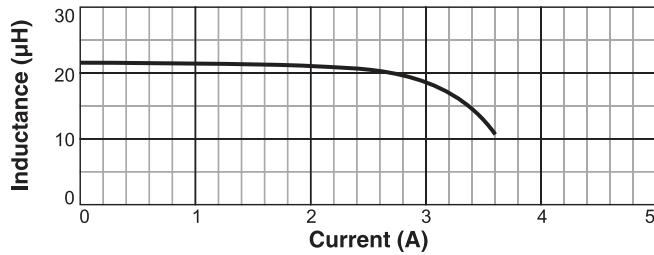
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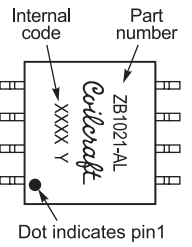
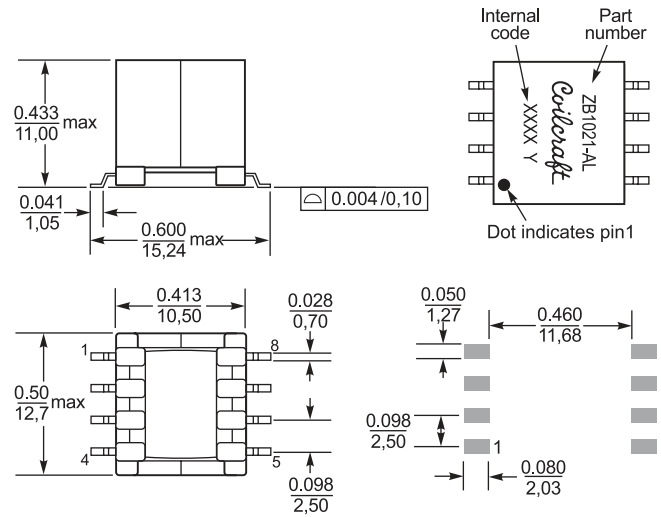


# Flyback Transformer – ZB1021-AL

## Typical L vs Current



## Dimensions



## Recommended Land Pattern

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



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