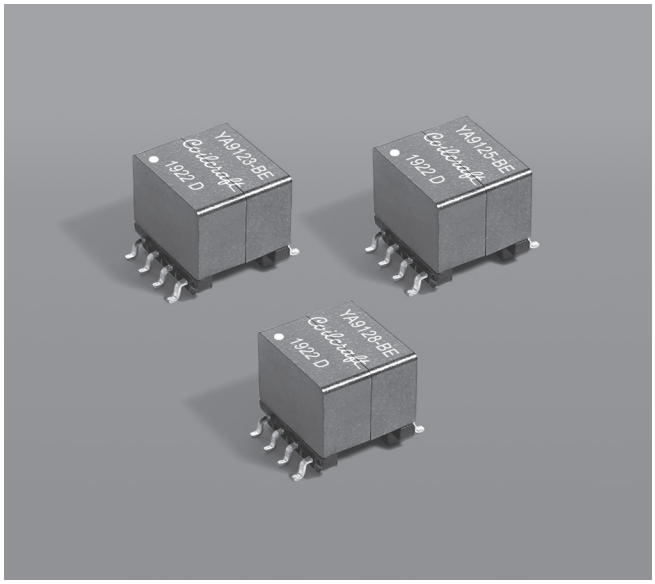
NEW!

Flyback Transformers

For Maxim MAX17690 DCM Flyback Controller

RoHS/ REACH COMPLIANT

Halogen Free



- Designed for Maxim Integrated MAX17690 60 V No-Opto Isolated Flyback Controller
- Discontinuous conduction mode Flyback transformers
- Optimized for 125 – 150 kHz with 8 – 28 V or 18 – 60 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 2.65 – 2.75 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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

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

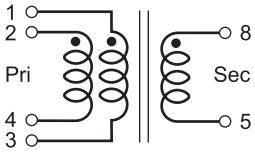
Part number[1]	Inductance at 0 A[2] ±10% (µH)	Isat[3] (A)	DCR max (Ohms) pri	DCR max (Ohms) sec	Leakage inductance max (µH)[4]	Turns ratio pri : sec	Isolation[5] (Vrms)	Power (W)	Output
8 – 28 V input									
YA9123-BED	8	5.9	0.025	0.024	0.124	1 : 0.751	1500	6	5 V, 1.2 A
YA9124-BED	8	5.9	0.025	0.125	0.124	1 : 1.625	1500	6	12 V, 0.5 A
YA9125-BED	8	5.9	0.025	0.306	0.100	1 : 3.125	1500	6	24 V, 0.25 A
18 – 60 V input									
YA9126-BED	40	2.3	0.095	0.020	0.460	1 : 0.313	1500	6	5 V, 1.2 A
YA9127-BED	40	2.3	0.095	0.090	0.353	1 : 0.750	1500	6	12 V, 0.5 A
YA9128-BED	40	2.3	0.095	0.260	0.350	1 : 1.375	1500	6	24 V, 0.25 A

1. **Packaging:** **D** = 13″ machine-ready reel. EIA-481 embossed plastic tape (350 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 150 kHz, 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.
4. Leakage Inductance is for the primary, measured with secondary windings shorted together.
5. 1500 Vrms, one minute isolation (hipot) between windings.
6. Electrical specifications at 25°C.

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

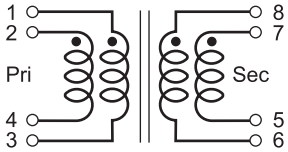
Schematics

YA9124, YA9125, YA9127, YA9128



*Connect pin 1 to 2 and pin 3 to 4 on the PC board

YA9123, YA9126



*Connect pin 1 to 2, 3 to 4, 5 to 6, and pin 7 to 8 on the PC board

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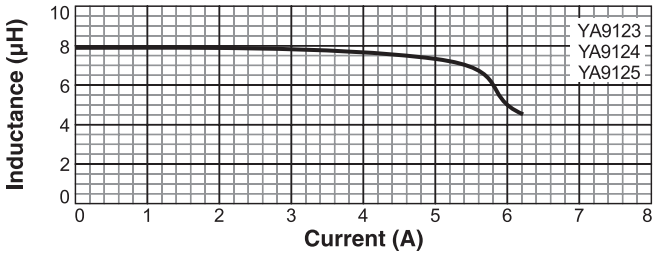
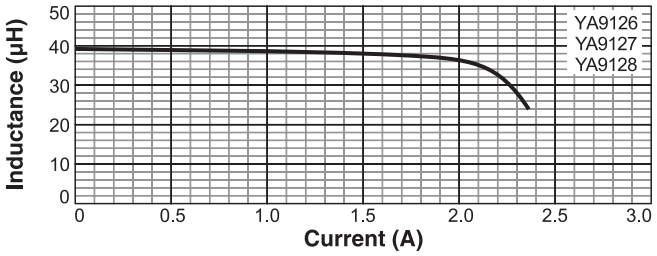
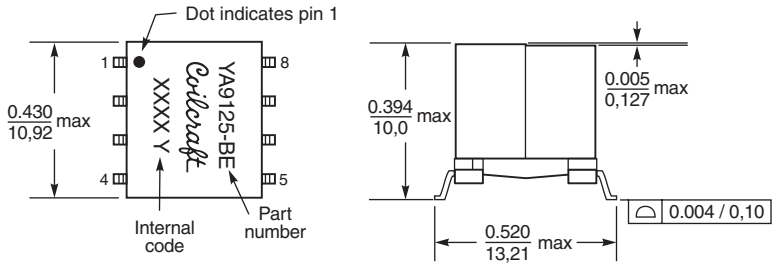
Flyback Transformers

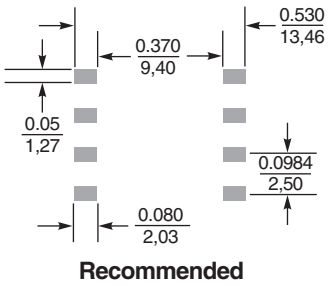
L vs Current





Dimensions





Recommended

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

Packaging 350/13″ reel Plastic tape: 24 mm wide, 0.50 mm thick, 16 mm pocket spacing, 10.35 mm pocket depth

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