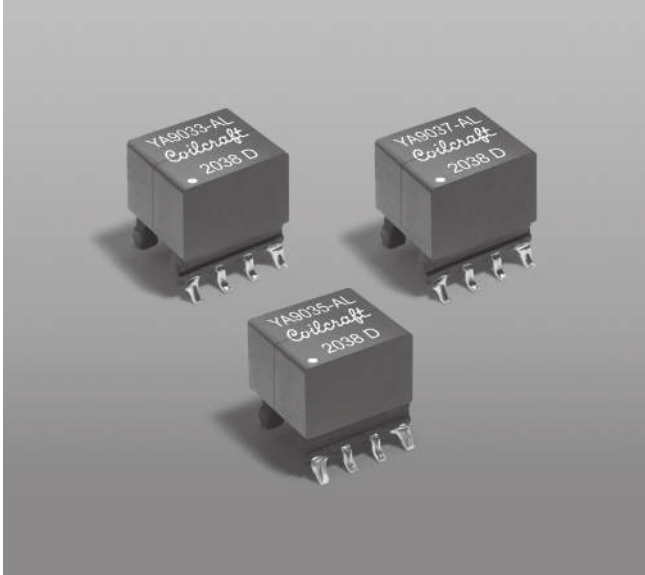




# No-Opto Flyback Transformers YA903X-AL



- Optimized for LM25180 and LM5180 flyback converters from Texas Instruments
- Five output versions for various single-output designs with 4 – 65 V input
- Eliminates auxiliary winding for simple and reliable converter designs

**Core material** Ferrite

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

**Weight** 2 – 2.3 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)

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

Part number <sup>1</sup>	Inductance at 0 A <sup>2</sup> ±10% (µH)	Inductance min at 2 A <sup>3</sup> (µH)	DCR max (Ohms)		Leakage inductance max (µH) <sup>4</sup>	Turns ratio pri : sec	Isolation <sup>5</sup> (Vrms)	Power (W)	Output
			pri	sec					
YA9033-ALD	32	25.6	0.240	0.032	0.480	1 : 0.5	1500	6	8 V, 0.75 A
YA9034-ALD	36	28.8	0.244	0.084	0.426	1 : 0.666	1500	6	12 V, 0.5 A
YA9035-ALD	30	24.0	0.168	0.168	0.290	1 : 1	1500	6	15 V, 0.4 A
YA9036-ALD	30	24.0	0.168	0.437	0.314	1 : 2	1500	6	24 V, 0.25 A
YA9037-ALD	32	25.6	0.232	1.444	0.384	1 : 3	1500	6	48 V, 0.1 A

1. **Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (300 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 300 kHz, 0.1 Vrms, 0 Adc.

3. Minimum inductance is for the primary, measured at 300 KHz, 0.1 Vrms, 2 Adc.

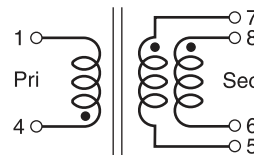
4. Leakage inductance is for the primary winding with the secondary windings shorted.

5. 1500 Vrms, one minute isolation (hipot) between primary and secondary.

6. Electrical specifications at 25°C.

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

## Schematics



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



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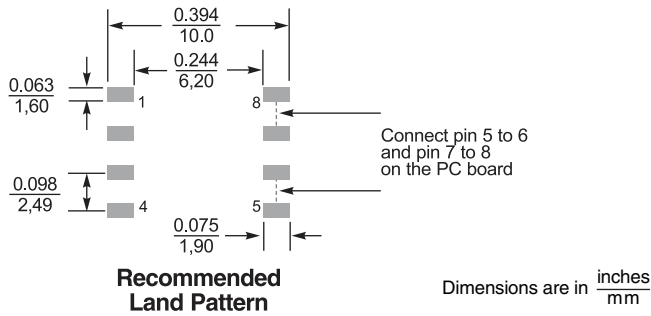
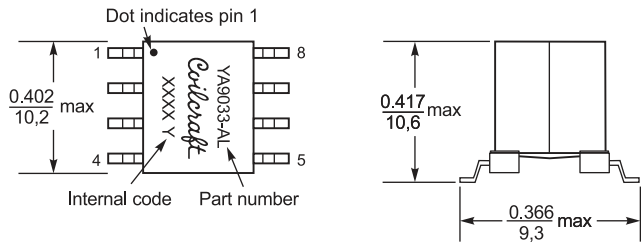
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# No-Opto Flyback Transformers – YA903x-AL

## Dimensions



**Packaging** 300 per 13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 20 mm pocket spacing, 10.69 mm pocket depth