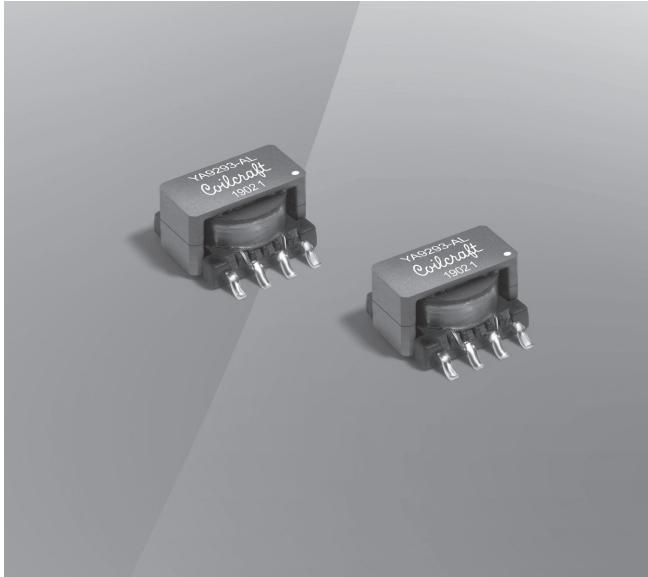


# Flyback Transformer

For Analog Devices ADP1031  
Isolated Micropower  
Management Unit



- Developed to use with isolated flyback DC-DC regulator in the Analog Devices ADP1031.
- 2250 Vrms, one minute isolation from primary to secondary
- AEC-Q200 Grade 1 qualified (-40°C to +125°C ambient)

**Core material** Ferrite

**Terminations** RoHS tin-silver-copper (95.5/3.8/0.7) over tin over nickel over phos bronze.

**Weight** 0.99 g

**Ambient temperature** -40°C to +125°C

**Maximum part temperature** +165°C

**Storage temperature** Component: -40°C to +165°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

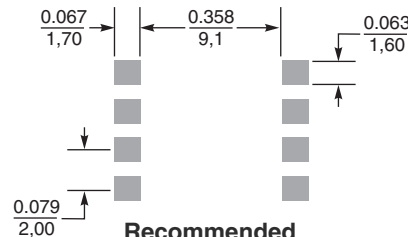
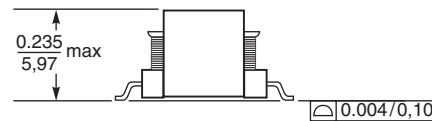
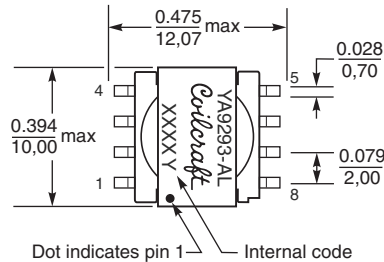
**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Packaging** 600 per reel, 13" reel Plastic tape: 24 mm wide, 0.37 mm thick, 16 mm pocket spacing, 6.11 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> | Input voltage (V) | Inductance <sup>2</sup> ±20% (µH) | Leakage inductance <sup>3</sup> max (µH) | DCR max (Ohms) |       | Turns ratio pri:sec | Isolation <sup>4</sup> (Vrms) | Isat <sup>5</sup> (A) | Output      |
|--------------------------|-------------------|-----------------------------------|--|----------------|-------|---------------------|-------------------------------|-----------------------|-------------|
|                          |                   |                                   |  | pri            | sec   |                     |                               |                       |             |
| YA9293-ALD               | 4.5 – 60          | 300                               | 1.62                                     | 1.2            | 0.785 | 1 : 1               | 2250                          | 0.25                  | 24 V, 20 mA |

- Packaging:** D = 13" machine ready reel. EIA-481 embossed plastic tape.
  - Inductance is for the primary, measured on an Agilent/HP 4284 at 250 kHz, 0.1 Vrms, 0 Adc.
  - Leakage inductance is for the primary with secondary winding shorted together.
  - Isolation (hipot) measured between windings for one minute.
  - DC current that causes an inductance drop of 20% (typ) from its value without current
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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

## Schematic

