

# Flyback Transformer For Maxim MAX5941A PoE Interface/PWM Controller



- Designed for IEEE 802.3af-compliant PoE applications
- Operates with 32-56 Volts input
- 1500 Vrms, one minute isolation between the primary and the

### Core material Ferrite

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

Weight 5.7 g

Ambient temperature -40°C to +125°C

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 per 13" reel Plastic tape: 44 mm wide, 0.37 mm thick, 28 mm pocket spacing, 9.0 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787\_PCB\_Washing.pdf.

| Part                | Inductance<br>at 0 A <sup>2</sup> | Inductance<br>at Ipk <sup>3</sup> | DCR max (Ohms) <sup>4</sup> |       |       | Leakage inductance5 | Turns ratio <sup>6</sup> |          | Ipk <sup>3</sup> |                     |
|---------------------|-----------------------------------|-----------------------------------|-----------------------------|-------|-------|---------------------|--------------------------|----------|------------------|---------------------|
| number <sup>1</sup> | ±5% (µH)                          | min (μH)                          | pri                         | sec   | bias  | max (µH)            | pri:sec                  | pri:bias | (A)              | Output <sup>7</sup> |
| C1099-AL            | 133.0                             | 126.0                             | 0.283                       | 0.013 | 0.480 | 3.5                 | 1:0.13                   | 1:0.57   | 0.9              | 3.3V, 2.5A          |

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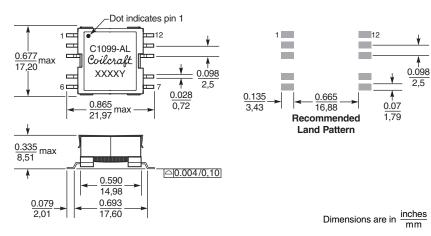
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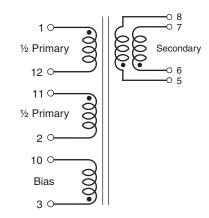
1. When ordering, please specify packaging code:

## C1099-ALD

- Packaging: D = 13" machine ready reel. EIA-481 embossed plastic tape (200 per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge)
  - ${f B}=$  Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D
- 2. Inductance is for the primary, measured at 300 kHz, 1.0 Vrms.
- 3. Peak primary current drawn at minimum input voltage.
- 4. Primary DCR is measured with the windings connected in series. Secondary DCR is measured with the windings connected in parallel.
- Leakage inductance is for the primary winding with the secondary wind-
- 6. Turns ratio is for the primary connected in series and the secondary connected in parallel.
- 7. Output of the secondary is with the windings connected in parallel. Bias winding output is 14 V.
- 8. Electrical specifications at 25°C.

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





Primary windings to be connected in series and secondary windings to be connected in parallel on the PC board.

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