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 secondary

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.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 0 A</th>
<th>Inductance at Ipk</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance</th>
<th>Turns ratio</th>
<th>Ipk (A)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1099-AL_</td>
<td>±5% (µH)</td>
<td>min (µH)</td>
<td>pri</td>
<td>sec</td>
<td>bias</td>
<td>max (µH)</td>
<td>pri : sec</td>
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<td></td>
<td>133.0</td>
<td>126.0</td>
<td>0.283</td>
<td>0.013</td>
<td>0.480</td>
<td>3.5</td>
<td>1:0.13</td>
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1. When ordering, please specify packaging code:

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)
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.
5. Leakage inductance is for the primary winding with the secondary winding shorted.
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.

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