PoE Transformer

For Maxim MAX5941B
PoE Interface/PWM Controller

- Designed for forward topology
- Operates at 275 kHz, at a 50% duty cycle

Core material  Ferrite
Terminations  RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight  5.6 g
Ambient temperature  –40°C to +85°C
Storage temperature  Component: –40°C to +85°C.
Tape and reel packaging: –40°C to +80°C
Resistance to soldering heat  Max three 40 second refloows at +260°C, parts cooled to room temperature before 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, 0.35 mm thick, 28 mm pocket spacing, 9.6 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 number1</th>
<th>Inductance2 min (µH)</th>
<th>DCR max3 (Ohms)</th>
<th>Leakage inductance4 max (µH)</th>
<th>Input voltage range (V)</th>
<th>Turns ratio5</th>
<th>Isolation6</th>
<th>Output7</th>
</tr>
</thead>
<tbody>
<tr>
<td>B0863-BL_</td>
<td>165</td>
<td>0.061 (pri)</td>
<td>0.75</td>
<td>28 – 60</td>
<td>pri:sec 1:0.29</td>
<td>1500 Vrms</td>
<td>3.3 V, 4 A</td>
</tr>
<tr>
<td></td>
<td>1.10 (reset)</td>
<td></td>
<td></td>
<td></td>
<td>pri:reset 1:1</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>1.29 (bias)</td>
<td></td>
<td></td>
<td></td>
<td>pri:drive 1:0.24</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>0.008 (sec)</td>
<td></td>
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</tr>
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1. When ordering, please specify a **packaging** code:

**B0863-BLD**

**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 10 kHz, 0.1 Vrms, 0 Adc.
3. DCR for the secondary is measured with the windings connected in parallel.
4. Leakage inductance is for the primary and is measured with all other windings shorted.
5. Turns ratio is with the secondary windings connected in parallel.
6. Isolation is measured from the primary, reset and bias windings to the secondary and drive windings.
7. Output is with the secondary windings connected in parallel.
8. Electrical specifications at 25°C.

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

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Parts manufactured prior to December 2011 may be marked differently.

Dimensions are in inches and mm.

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.