Flyback Transformer
For Microsemi
PoE PD Power Supply

- Developed for use with Microsemi UC3844 Current Mode Controller and LX1752 Buck Regulator
- 1500 Vrms, one minute isolation from primary, auxiliary and reset to secondary; 500 Vrms from primary and reset to auxiliary
- Designed for 36 V – 57 V input; 200 kHz

Core material  Ferrite
Terminations  RoHS tin-silver over tin over nickel over phosph bronze. Other terminations available at additional cost.
Weight  6.7 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 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  175 per 13” reel. Plastic tape: 32 mm wide, 0.5 mm thick, 28 mm pocket spacing, 12.93 mm pocket depth
PCB washing  Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

<table>
<thead>
<tr>
<th>Part number</th>
<th>L at 0 A</th>
<th>L at Ipk</th>
<th>Input voltage (V)</th>
<th>DCR max (Oms)</th>
<th>Leakage L</th>
<th>Turns ratios</th>
<th>Ipk</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA3905-CLD</td>
<td>27.0</td>
<td>24.3</td>
<td>37 –57</td>
<td>0.170 (pri)</td>
<td>3.75 : 1</td>
<td>1.2</td>
<td>5 V, 2.5 A (sec)</td>
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<tr>
<td></td>
<td>±10% (µH)</td>
<td></td>
<td></td>
<td>0.015 (sec)</td>
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<td></td>
<td>0.385 (aux)</td>
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<td></td>
<td>0.371 (reset)</td>
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</tbody>
</table>

1. When ordering, please specify packaging code:

**HA3905-CLD**

**Packaging:**
- **D** = 13” machine-ready reel. EIA-481 embossed plastic tape (175 parts 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 250 kHz, 0.1 Vrms, 0 Adc.
3. Ipk is peak primary current drawn at minimum input voltage.
4. Leakage inductance measured on the primary winding with all secondary pins shorted.
5. Output of the secondary is with the windings connected in parallel.
6. Electrical specifications at 25°C.
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Dimensions are in inches mm

Recommended Land Pattern

Secondary windings to be connected in parallel on the PC board

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Specification subject to change without notice.
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