## Flyback Transformer

For Texas Instruments

TPS23753A PoE controller

- Flyback transformer for 10 W PoE applications
- Developed to work with TI TPS23753A PoE controller
- 1500 Vrms isolation (hipot), one minute from primary and bias to secondary and sync

### Core material
- Ferrite

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

### Weight
- 6.2 g

### Ambient temperature
- -40°C to +85°C

### Maximum part temperature
- +125°C (ambient + temp rise)

### 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)

### Failures in Time (FIT) / Mean Time Between Failures (MTBF)
- 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

### 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 to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

### Electrical specifications
- At 25°C. Refer to Doc362 “Soldering Surface Mount Components” before soldering.

### Leaksage inductance
- L at 0A: 133.0 µH
- L at Ipk: 123.7 µH
- DCR max: 0.330 Ω

### Capacitance
- Pri max: 0.0135 pF
- Sec max: 0.230 pF
- Bias max: 0.190 pF

### Turns ratio
- Pri : Sec : Bias : Sync
- 1 : 0.167 : 0.361 : 0.167

### Output
- 5.0 V, 2.0 A

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<table>
<thead>
<tr>
<th>Part number</th>
<th>L at 0A</th>
<th>L at Ipk</th>
<th>DCR max</th>
<th>Pri</th>
<th>Sec</th>
<th>Bias</th>
<th>Sync</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA6340-AL_</td>
<td>133.0</td>
<td>123.7</td>
<td>0.330</td>
<td>0.0135</td>
<td>0.230</td>
<td>0.190</td>
<td></td>
</tr>
</tbody>
</table>

1. When ordering, please specify packaging code:

   PA6340-ALD

   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 1 kHz, 0.5 Vrms, 0 Adc.

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Dot indicates pin 1

Recommended Land Pattern

Dimensions are in inches mm