Flyback Transformer

For Linear Technology
LT8584

- Developed for Linear Technology LT8584 Isolated Monolithic Active Cell Balancer
- Designed to operate at 140 kHz; Rated for 7 – 12 Watts
- 1500 Vrms, one minute isolation between primary and secondary
- AEC-Q200 Grade 1 qualified (–40°C to +125°C ambient)

Core material: Ferrite
Terminations: RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight: 3.9 – 4.2 g
Ambient temperature: –40°C to +125°C
Maximum part temperature: +165°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

<table>
<thead>
<tr>
<th>Part number</th>
<th>Input voltage (V)</th>
<th>Inductance at 0 A² (µH)</th>
<th>Inductance at Ipk (µH)</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance max (µH)</th>
<th>Turns ratio</th>
<th>Ipk (A)</th>
<th>Output voltage (V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA5743-AL</td>
<td>2 – 8</td>
<td>4.0</td>
<td>3.6</td>
<td>0.012</td>
<td>0.500</td>
<td>0.116</td>
<td>1 : 4</td>
<td>7.0</td>
</tr>
</tbody>
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1. When ordering, please specify packaging code:
   NA5743-AL-D
   Packaging: D = 13” machine-ready reel. EIA-481 embossed plastic tape (200 parts per full reel).
   B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.

2. Inductance is for the primary, measured at 150 kHz, 0.1 Vrms, 0 Adc.
3. Ipk is peak primary current drawn at minimum input voltage.
4. DCR for the primary is measured with windings connected in parallel.
5. Leakage inductance is for the primary, measured with secondary pins shorted.
6. Turns ratio is with the primary windings connected in parallel.
7. Electrical specifications at 25°C.
   Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Dimensions are in inches / mm

Recommended Land Pattern

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