NEW!

Flyback Transformer
For Silicon Labs Si828x 5kV
Isolated DC-DC Converter

- Developed for use with Silicon Labs Si828x isolated dc-dc converter reference designs.
- 5000 Vrms, one minute isolation from primary to secondary
- Designed to meet reinforced insulation class with 8 mm creepage and clearance.
- AEC-200 Grade 1 qualified (−40°C to +125°C ambient)

Core material Ferrite
Terminations RoHS tin-silver-copper (95.5/3.8/0.7) over tin over nickel over phos bronze.

Weight 1.1 g
Ambient temperature −40°C to +125°C
Maximum part temperature +160°C
Storage temperature Component: −40°C to +160°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
- 700 per 13″ reel Plastic tape: 32 mm wide, 0.40 mm thick,
- 16 mm pocket spacing, 5.72 mm pocket depth
- Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

PCB washing
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Electrical specifications at 25°C.
- Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

1. When ordering, specify a packaging code:
   - TA7788-ALD
     **Packaging:**
     - D = 13″ machine ready reel. EIA-481 embossed plastic tape.
     - 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 on an Agilent/HP 4284 at 250 kHz, 0.1 Vrms, 0 Adc.
3. Leakage inductance measured between pins 2 and 3 at 250 kHz, 0.1 Vrms, 0 Adc with all secondary pins shorted.
4. DC current that causes an inductance drop of 30% (typ) from its value without current
5. Output of Sec1 is 15 V, 0.13 A. Output of Sec2 is 9 V, 0.02 A.
6. Electrical specifications at 25°C.

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<table>
<thead>
<tr>
<th>Part number1</th>
<th>Input voltage (V)</th>
<th>Inductance2 (\pm 5%) ((\mu)H)</th>
<th>Leakage inductance3 max ((\mu)H)</th>
<th>DCR max (Ohms) pri sec1 sec2</th>
<th>Turns ratio pri: sec1: sec2</th>
<th>Isat(^4) (A)</th>
<th>Output5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA7788-AL_</td>
<td>7 – 24</td>
<td>25.0</td>
<td>0.554</td>
<td>0.490 0.730 0.492</td>
<td>1:1.25:0.75</td>
<td>1.4</td>
<td>15 V, 0.13 A</td>
</tr>
</tbody>
</table>

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Dimensions are in inches mm

Recommended Land Pattern

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