Flyback Transformers
For Texas Instruments
LM5072 High Power PD

- Designed for 25 Watt PoE application
- Input range from 18 to 57 V
- Primary to secondary isolation: 1500 Vrms
- Auxiliary winding output: 11 V, 20 mA

Core material: Ferrite
Terminations: RoHS compliant tin-silver over tin over nickel over phosphor bronze. Other terminations available at additional cost.
Weight: 13.6 – 13.9 g
Ambient temperature: -40°C to +125°C
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: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth

PCB washing: Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

1. When ordering, please specify a packaging code:
   - FA2898-AL
     Packaging: D = 13” machine ready reel. EIA-481 embossed plastic tape (175 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 250 kHz, 0.7 Vrms, 0 Adc.

<table>
<thead>
<tr>
<th>Part number</th>
<th>L at 0 A² ±10% (µH)</th>
<th>L at Ipk³ min (µH)</th>
<th>DCR max (mOhms)⁴</th>
<th>Leakage L (µH)⁵</th>
<th>Turns ratio⁶</th>
<th>Ipk³ (A)</th>
<th>Output⁷</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA2677-AL__</td>
<td>50</td>
<td>40.8</td>
<td>26</td>
<td>2.6</td>
<td>328</td>
<td>2.20</td>
<td>1: 0.12</td>
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<tr>
<td>FA2898-AL__</td>
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<td>40.8</td>
<td>26</td>
<td>4.0</td>
<td>315</td>
<td>1.05</td>
<td>1: 0.18</td>
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<td>FA2899-AL__</td>
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<td>13</td>
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<td>0.473</td>
<td>1: 0.35</td>
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<tr>
<td>FA2900-AL__</td>
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<td>40.8</td>
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<td>20</td>
<td>315</td>
<td>0.409</td>
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<tr>
<td>FA2901-AL__</td>
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<td>40.8</td>
<td>26</td>
<td>37</td>
<td>305</td>
<td>0.381</td>
<td>1: 0.59</td>
</tr>
</tbody>
</table>

3. Ipk is the peak current drawn at minimum input voltage.
4. DCR for the primary and the secondary is with windings connected in parallel.
5. Leakage inductance measured on the primary windings with all secondary pins shorted.
6. Turns ratios are with the primary windings and the secondary windings connected in parallel.
7. Output is with the secondary windings connected in parallel.

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

The primary windings and the secondary windings are to be connected in parallel on the PC board.

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This product may not be used in medical or high risk applications without prior Coilcraft approval.
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