Flyback Transformer

For Silicon Laboratories Si3402 PD Controller

- Specified by Silicon Laboratories for Si3402 PD controller up to 15 W
- Designed to operate in continuous mode at 250 kHz with an input of 36–72 Vdc
- 1500 Vrms, one minute isolation (hipot) between primary and secondary

Core material
Ferrite

Terminations
RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

Weight
6.79 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

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

Part number1
JA4641-ALD

Inductance

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 0 A2 ±10% (µH)</th>
<th>Inductance at 2 A3 (µH)</th>
<th>DCR max (Ohms) pri sec</th>
<th>Leakage inductance max (µH)</th>
<th>Turns ratio pri : sec</th>
<th>Power (W)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>JA4641-ALD</td>
<td>40</td>
<td>36</td>
<td>0.10 0.275 0.56</td>
<td>1 : 2</td>
<td>15</td>
<td>24 V, 0.625 A</td>
<td></td>
</tr>
</tbody>
</table>

1. 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).

2. Inductance is for the primary, measured at 200 kHz, 0.2 Vrms, 0 Adc.

3. Minimum inductance for the primary, measured at 200 kHz, 0.2 Vrms, 2 Adc.

4. Leakage inductance is for the primary, measured with secondary windings shorted together.

5. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.
**Flyback Transformer – JA4641-AL**

Dimensions are in **inches** or **mm**.

**Schematics**

Connect pin 7 to 8 and pin 9 to 10 on the PC board.

**Packaging** 175 per 13", reel Plastic tape: 32 mm wide, 0.5 mm thick, 28 mm pocket spacing, 13.40 mm pocket depth.