PoE Flyback Transformer for Si3406x

1. When ordering, please specify packaging code:

   CX9642-AL

   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 333.3 kHz, 0.1 Vrms, 0 A dc.
3. Peak primary current drawn at minimum input voltage.
4. Leakage inductance is for the primary winding with the secondary windings shorted.
5. Turns ratio is with the primary and the secondary windings connected in parallel.
6. Output is with the secondary windings connected in parallel. Output of the auxiliary winding is 14.5 V, 25 mA.
7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 0 A²</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance max (µH)</th>
<th>Turns ratio</th>
<th>Ipk (A)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>CX9642-AL_</td>
<td>±15% (µH)</td>
<td></td>
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<tr>
<td></td>
<td>70.0</td>
<td>60.0</td>
<td>0.08</td>
<td>1.0</td>
<td>3.0</td>
<td>5.0V, 6 A</td>
</tr>
</tbody>
</table>

Core material: Ferrite
Terminations: RoHS tin-silver-copper over tin over nickel over phosphorus bronze.
Weight: 13.1 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)
Packaging: 175 per 13” reel. Plastic tape: 44 mm wide, 0.4 mm thick, 32 mm pocket spacing, 11.9 mm pocket depth

Developed for Silicon Labs Si3406, Si34601 and Si34062 30W PD Flyback converter.
Designed to meet 30 W PoE IEEE 802.3at-2009 standard.
Optimized for 220 kHz with 36 – 57 input voltage; Can also operate from 100 kHz to 500 kHz.
Isolation: 1500 Vrms, one minute pri and aux to sec; 500 Vrms pri to aux.

1. Connect pin 1 to 2 and pin 3 to 4 on the PC Board.
2. Connect pin 10, 11 and 12 together and pins 7, 8 and 9 together on the PC Board.
Flyback Transformer for Si3406x

Dimensions are in inches

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Specification subject to change without notice.
Please check web site for latest information.