Flyback Transformer for TI TPS23752 POE PD controller

- Developed for Texas Instruments green mode TPS23752 POE PD controller
- 1500 Vrms, one minute isolation (hipot) primary and bias to secondary; 500 Vrms, one minute isolation primary to bias; 750 Vrns all pins to the core.

Core material Ferrite
Terminations RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight 11.7 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 refloows 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, 0.5 mm thick, 32 mm pocket spacing, 12.0 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

1. When ordering, please specify termination and packaging codes:

   JA4456-DL_ 70 0.07 0.0043 0.310 0.615 158 1 : 0.182 1 : 0.409 3.3 5 V, 5 A

   • JA4456-DLD
   - Termination: L = RoHS tin-silver over tin over nickel over phos bronze.
     - Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).
   - 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).
     - B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

2. Inductance is for the primary, measured at 250 kHz, 0.5 Vrms.
3. Peak primary current drawn at minimum input voltage.
4. DCR for the primary and secondary are with the windings connected in parallel.
5. Leakage inductance is for the primary windings with all the secondary windings shorted.
6. Capacitance is for the primary, measured at 250 kHz, 0.5 Vrms with all secondary pins shorted.
7. Turns ratios are with the primary windings and secondary windings connected in parallel.
8. Output of the secondary is with all windings connected in parallel. Bias winding output is 12 V, 20 mA.
9. Electrical specifications at 25°C.

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

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**Part number**

<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>Capacitance max (pF)</th>
<th>Turns ratios</th>
<th>Ipk (A)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
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<td>JA4456-DL_</td>
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</table>

- Dimensions are in inches/mm
- Primary windings and secondary windings to be connected in parallel on PC board.

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