Flyback Transformer

For TI 30 Watt PoE PSE Reference Design PMP20588

- Operates at 150 kHz with 6–32 Volts input.
- Isolation: 1500 Vrms, one minute pri and aux to sec; 500 Vrms pri to aux

Core material Ferrite
Terminations RoHS tin-silver-copper over tin over nickel over phosph bronze.
Weight 24.3 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 24 per tray
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

### Part number

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 0 A(^1) ±10% (µH)</th>
<th>Inductance at Ipk(^2) min (µH)</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance max (µH)</th>
<th>Turns ratio(^5)</th>
<th>Ipk(^2) (A)</th>
<th>Output(^6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA6582-AL</td>
<td>9.0</td>
<td>7.2</td>
<td>0.010</td>
<td>0.162</td>
<td>1:5</td>
<td>10.3</td>
<td>54 V, 0.6 A</td>
</tr>
</tbody>
</table>

1. Inductance is for the primary, measured at 150 kHz, 0.1 Vrms, 0 A\(d,c\).
2. Peak primary current drawn at minimum input voltage.
3. DCR for primary is per both windings connected in parallel.
4. Leakage inductance is for the primary winding with the secondary windings shorted.
5. Turns ratio is with the primary windings connected in parallel.
6. Output of the auxiliary winding is 10.2 V.
7. Electrical specifications at 25°C.

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

The primary windings to be connected in parallel on the PC board.
Flyback Transformer for Texas Instruments PMP20588

Dimensions are in inches

Recommended Land Pattern

Dot indicates pin 1

Dimensions are in mm

Recommended Land Pattern