No-Opto Flyback Transformer

For Maxim Integrated MAX17690

Peak Current Mode Controller

- Optimized for Maxim’s MAXREFDES1226 reference design and MAX17690 No-Opto Isolated Flyback Controllers
- Designed for discontinuous conduction mode, 17 – 36 V input
- 1500 Vrms, 1 minute isolation (hipot), between primary to secondary

Core material  Ferrite
Terminations  RoHS tin-silver-copper over tin over nickel over phos bronze. Other terminations available at additional cost.
Weight  1.5 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 refows 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  500 per 13” reel. Plastic tape: 24 mm wide, 0.36 mm thick, 16 mm pocket spacing, 6.13 mm pocket depth
PCB washing  Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

<table>
<thead>
<tr>
<th>Part number¹</th>
<th>Inductance at 0 Adc² ±10% (µH)</th>
<th>Inductance at 2.6 Adc³ min (µH)</th>
<th>Isat⁴ (A)</th>
<th>DCR max (Ohms) pri sec max (µH)</th>
<th>Leakage Inductance 5 (µH)</th>
<th>Turns ratio pri : sec</th>
<th>Isolation⁶ (Vrms)</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>YA9280-ALD</td>
<td>18</td>
<td>15.3</td>
<td>3.75</td>
<td>0.101</td>
<td>0.027</td>
<td>0.572</td>
<td>1 : 0.4</td>
<td>1500</td>
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</tbody>
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1. Packaging: D = 13” machine ready reel. EIA-481 embossed plastic tape (500 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 150 kHz, 0.1 Vrms, 0 Adc.
3. Minimum inductance is for the primary, measured at 150 KHz, 0.1 Vrms, 2.6 Adc.
4. DC current that causes an inductance drop of 30% (typ) from its value without current.
5. Leakage inductance is for the primary winding with the secondary windings shorted.
6. Isolation (hipot) measured between windings for one minute.
7. Electrical specifications at 25°C.

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

L vs Current

![L vs Current Graph]

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