Isolation Transformer
For Texas Instruments SN6501 Transformer Driver

- Developed to work with Texas Instruments SN6501 Transformer Driver for Isolated Power Supplies
- Center tapped primary and secondary windings
- Designed to meet UL/CSA/IEC 60950 Basic Insulation with 1.5 mm creepage and clearance.

**Core material** Ferrite
**Terminations** RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.
**Weight** 0.98 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
**Isolation** 2500 Vrms, one minute, winding to winding
**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

**Packaging**
- 600/13″ reel Plastic tape: 24 mm wide, 0.37 mm thick, 16 mm pocket spacing, 6.1 mm pocket depth
- PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

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<table>
<thead>
<tr>
<th>Part number1</th>
<th>Pri/sec voltage</th>
<th>Inductance2 (µH)</th>
<th>DCR max (Ohms)3 pri/sec</th>
<th>Leakage inductance4 (µH)</th>
<th>Volt-time product5 (V-µsec)</th>
<th>Power6 (W)</th>
<th>Turns ratio6 pri : sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA5632-AL_</td>
<td>3.3 V to 5.0 V</td>
<td>17.8</td>
<td>0.086</td>
<td>0.219</td>
<td>0.464</td>
<td>17.6</td>
<td>2.0</td>
</tr>
</tbody>
</table>

1. When ordering, please specify *termination* and *packaging* codes:
   - **MA5632-ALD**

   **Termination:** L = RoHS compliant 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 (600 per full reel).
   **B** = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.

2. Inductance is tested between pins 4 and 3 at 500 kHz, 0.5 Vrms, 0 Adc.
3. DCR is per winding.
4. Leakage inductance is for the primary with both windings connected in series and with the secondary windings shorted.
5. Based on Bs at the core at 25°C and number of turns on winding 4-3.
6. Calculated output power based on 150 kHz operating frequency. Power varies depending on application.
7. Electrical specifications at 25°C.

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

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**Dimensions are in** inches

**Core material** Ferrite

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