## Flyback Transformer

For TI TPS55340 DC-DC Regulator

- Developed for Texas Instruments TPS55340 Boost/SEPIC/Flyback DC-DC Regulator
- Designed to operate at 200 kHz with 2.9–32 Volts input
- 1500 Vrms, one minute isolation from primary windings to secondary windings

### Core material
Ferrite

### Terminations
RoHS tin-silver over tin over nickel over phos bronze. Other terminations available at additional cost.

### Weight
6.5 g

### Ambient temperature
-40°C to +85°C

### Storage temperature
Component: -40°C to +85°C.
Tape and reel packaging: -40°C to +80°C

### Resistance to soldering heat
Max three 40 second reflo ws 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
175 per 13″ reel Plastic tape: 32 mm wide, 0.5 mm thick, 28 mm pocket spacing, 12.93 mm pocket depth

### PCB washing
Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

### Technical Specifications

<table>
<thead>
<tr>
<th>Part number¹</th>
<th>Power (W)</th>
<th>Inductance at 0 A² (µH) ±10%</th>
<th>Inductance at Ipk³ (µH) min</th>
<th>DCR max (Ohms)⁴ pri</th>
<th>Leaksage inductance max (µH) pri</th>
<th>Turns ratio⁶</th>
<th>Ipk³ (A)</th>
<th>Output⁷</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA5889-AL__</td>
<td>12</td>
<td>12</td>
<td>10.8</td>
<td>0.03</td>
<td>0.195</td>
<td>1 : 0.833</td>
<td>5.5</td>
<td>12 V, 1 A</td>
</tr>
</tbody>
</table>

1. When ordering, please specify **packaging** code:

**NA5889-ALD**

**Packaging:**
- **D** = 13″ machine-ready reel. EIA-481 embossed plastic tape (175 parts 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 measured at 200 kHz, 1.0 Vrms, 0 Adc.
3. Peak primary current drawn at minimum input voltage.
4. DCR for the primary and for the secondary is with windings connected in parallel.
5. Leakage inductance is for the primary and is measured with the secondary shorted.
6. Turns ratio is with the primary and the secondary windings connected in parallel.
7. Output of the secondary is with the windings connected in parallel.
8. Electrical specifications at 25°C.

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

**Primary windings and secondary windings to be connected in parallel on PC board**

- **0.080** 2.03
- **0.050** 1.27
- **0.098** 2.30

**Recommended Land Pattern**

- **0.028** 0.70
- **0.098** 2.30

Dimensions are in inches/mm