Gate Drive Transformer

For use with TI UCD3138
Digital Power Controllers

- Selected by Texas Instruments for their UCD3138 evaluation boards.
- Designed to meet UL/CSA/IEC 60950 Reinforced Insulation specification: 3.0 mm creepage and clearance.
- Isolation: 3000 Vrms primaries to secondary; 500 Vrms windings to core.

Core material: Ferrite
Terminations: RoHS compliant tin-silver over tin over nickel over phos-bronze.
Weight: 6.3 g
Ambient temperature: –40°C to +85°C
Maximum part temperature: +125°C (ambient + temp rise)
Storage temperature: Component: –40°C to +125°C.
Packaging: –40°C to +80°C
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:
- 200/13″ reel Plastic tape: 44 mm wide, 0.4 mm thick, 24 mm pocket spacing, 10.56 mm pocket depth

1. When ordering, please specify a packaging code:
   - GA3550-BL
   - Packaging: D = 13″ machine ready reel. EIA-481 embossed plastic tape (200 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.

<table>
<thead>
<tr>
<th>Part number</th>
<th>Turns ratio</th>
<th>Primary inductance</th>
<th>Leakage inductance</th>
<th>DCR max</th>
<th>Volt-time product</th>
<th>SRF typ</th>
<th>Capacitance max</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA3550-BL</td>
<td>1 : 1 : 1</td>
<td>460</td>
<td>1.15 (Pri [A])</td>
<td>0.410 (Pri [A])</td>
<td>165</td>
<td>5.85</td>
<td>34.0 (1 – 10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.25 (Pri [B])</td>
<td>0.475 (Pri [B])</td>
<td></td>
<td></td>
<td>10.5 (1 – 5)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.440 (sec)</td>
<td></td>
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</tr>
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2. Inductance is for each winding, measured at 200 kHz, 0.4 Vrms, 0 Adc.
3. Leakage inductance is measured at 200 kHz, 0.4 Vrms with secondary pins shorted.
4. Volt-time product is per winding.
5. SRF is per winding, measured on an Agilent/HP 4192 or equivalent.
6. Electrical specifications at 25°C.
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.