Power Inductor – GA3252-AL

- High current surface mount toroidal power inductor
- Specified by National Semiconductor for 2 A to 14 A output applications

Core material: Ferrite
Terminations: RoHS compliant tin-silver (96.5/3.5) over copper. Other terminations available at additional cost.
Weight: 11.6 g
Ambient temperature: –40°C to +85°C with Irms current, +85°C to +125°C with derated current
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 refloys 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: 200 per 13" reel. Plastic tape: 44 mm wide, 0.5 mm thick, 32 mm pocket spacing, 10.4 mm pocket depth
PCB washing: Only pure water or alcohol recommended

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance</th>
<th>DCR max</th>
<th>SRF typ</th>
<th>Isat (A) 10% drop</th>
<th>Isat (A) 20% drop</th>
<th>Isat (A) 30% drop</th>
<th>Isat (A) 20°C rise</th>
<th>Isat (A) 40°C rise</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA3252-AL_</td>
<td>12.0</td>
<td>0.017</td>
<td>20</td>
<td>6.5</td>
<td>8.0</td>
<td>13</td>
<td>6.5</td>
<td>10</td>
</tr>
</tbody>
</table>

1. When ordering, specify termination and packaging codes:

**GA3252-ALD**

Termination: L = RoHS compliant tin-silver over copper.
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 (200 per full reel). Quantities less than full reel available in tape (not machine ready) or with leader and trailer ($25 charge).
B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to D.

2. Inductance tested at 100 kHz, 0.1 Vrms on Agilent/HP 4192A.
3. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
4. SRF measured on an Agilent/HP 8753ES network analyzer.
5. DC current at which the inductance drops the specified amount from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.
Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Recommended Land Pattern

Dimensions are in inches and mm.