# SMT PFC Boost Inductor

**For ON Semiconductor**

**NCP1606 PFC Controller**

- Designed to operate in 100 Watt applications.
- Referenced as L<sub>BOOST</sub> in application note AND8282/D.
- Auxiliary winding provides zero current detection (ZCD) information and can also supply power to the NCP1606.
- 500 Vrms winding to winding and winding to core isolation

**Core material** Ferrite

**Terminations** RoHS compliant tin-silver over tin over nickel over phosphor bronze. Other terminations available at additional cost.

**Weight** 27 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 +125°C.
Tray packaging: –40°C to +80°C

**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** 24 parts per tray

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

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### Part Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance&lt;sup&gt;1&lt;/sup&gt; ±10% (µH)</th>
<th>DCR max (Ohms)</th>
<th>SRF&lt;sup&gt;2&lt;/sup&gt; (MHz)</th>
<th>Turns ratio</th>
<th>Isat (A)&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Irms (A)&lt;sup&gt;3&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA2972-AL</td>
<td>330</td>
<td>0.30</td>
<td>0.35</td>
<td>1.2</td>
<td>8:1</td>
<td>4.2</td>
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<td>4.5</td>
<td>4.8</td>
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<td></td>
<td></td>
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<td>1.7</td>
<td>2.3</td>
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</table>

1. Inductance measured at 100 kHz, 1.1 Vrms, 0 Adc using an Agilent/HP 4263B impedance analyzer or equivalent.
2. SRF tested on an Agilent/HP 4192A.
3. DC current at which the inductance drops the specified amount from its value without current.
4. Current that causes the specified temperature rise from 25°C ambient.
5. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.
SMT PFC Boost Inductor - GA2972-AL

L vs Current

L vs Frequency

Irms Derating

This product may not be used in medical or high risk applications without prior Coilcraft approval.
Specification subject to change without notice.
Please check web site for latest information.