# PFC Boost Inductor

For ON Semiconductor

**NCP1606 PFC Controller**

- Designed to operate in 100 Watt applications.
- Referenced as $L_{\text{BOOST}}$ in application note AND8282/D.
- Auxiliary winding provides zero current detection (ZCD) information and can also supply power to the NCP1606.
- 1000 Vrms winding to winding and winding to core isolation

## Core material
Ferrite

## Terminations
RoHS compliant tin-silver over tin over copper over copper-steel

## Weight
27.2 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.
Tray packaging: -40°C to +80°C

## Moisture Sensitivity Level (MSL)
1 (unlimited floor life at <30°C / 85% relative humidity)

## Packaging
36 parts per tray

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

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### Table: Inductor Specifications

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance at 100 kHz ±15% (µH)</th>
<th>Inductance at Ipk min (µH)</th>
<th>Ip (A)</th>
<th>DCR max (Ohms)</th>
<th>Leakage inductance max (µH)</th>
<th>Turns ratio Pri : Aux</th>
<th>Irms (A)</th>
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<tbody>
<tr>
<td>FA2890-AL</td>
<td>400.0</td>
<td>340.0</td>
<td>3.7</td>
<td>0.27</td>
<td>50.0</td>
<td>10 : 1</td>
<td>2.2</td>
</tr>
</tbody>
</table>

1. Inductance measured at 100 kHz, 0.1 V, 0 Adc using an Agilent/HP 4284A impedance analyzer or equivalent.
2. DCR measured on Cambridge Technology micro-ohmmeter.
3. Leakage inductance is for the primary and measured with pins 4 and 8 shorted.
4. Current that causes a 40°C temperature rise from 25°C ambient.
5. Electrical specifications at 25°C.

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## Irms Derating

![Irms Derating Graph](image)

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