

**NEW!**

# SMT PFC Boost Inductor

For ON Semiconductor  
NCP1606 PFC Controller



- Designed to operate in 100 Watt applications.
- Referenced as  $L_{BOOST}$  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 phos bronze. Other terminations available at additional cost.

**Weight** 27 g

**Ambient temperature**  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  with  $I_{rms}$  current,  $+85^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  with derated current

**Storage temperature** Component:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .  
Packaging:  $-55^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$

**Resistance to soldering heat** Max three 40 second reflows at  $+260^{\circ}\text{C}$ , parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 85% relative humidity)

**Mean Time Between Failures (MTBF)** 26,315,789 hours

**Packaging** 50/13" reel Plastic tape: 56 mm wide, 0.5 mm thick, 36 mm pocket spacing, 14.45 mm pocket depth

**PCB washing** Only pure water or alcohol recommended

Part number <sup>1</sup>	Inductance <sup>2</sup> $\pm 10\%$ ( $\mu\text{H}$ )	DCR max (Ohms)		SRF <sup>3</sup> (MHz)	Turns ratio pri : aux	Isat (A) <sup>4</sup>			Irms (A) <sup>5</sup>	
		pri	aux			10% drop	20% drop	30% drop	20°C rise	40°C rise
GA2972-AL_	330	0.30	0.35	1.2	8 : 1	4.2	4.5	4.8	1.7	2.3

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

**GA2972-AL D**

**Packaging:** **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (50 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 100 kHz, 1.1 Vrms, 0 Adc using an Agilent/HP 4263B impedance analyzer or equivalent.

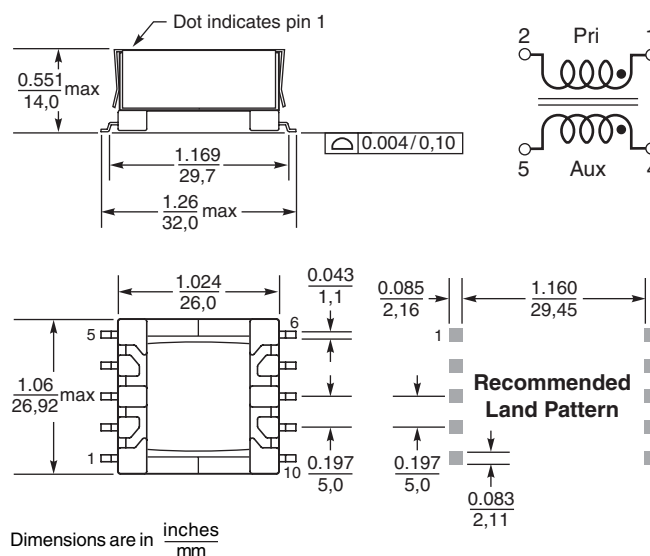
3. SRF tested on an Agilent/HP 4192A.

4. DC current at which the inductance drops the specified amount from its value without current.

5. Current that causes the specified temperature rise from  $25^{\circ}\text{C}$  ambient.

6. Electrical specifications at  $25^{\circ}\text{C}$ .

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



Dimensions are in  $\frac{\text{inches}}{\text{mm}}$

# Coilcraft®

These parts are preproduction products for electrical evaluation only. Specification subject to change without notice.

Document 657-1 Revised 06/23/08

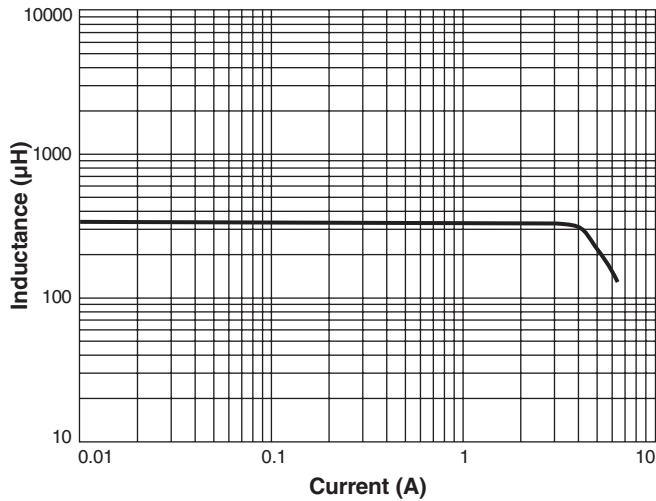
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web http://www.coilcraft.com

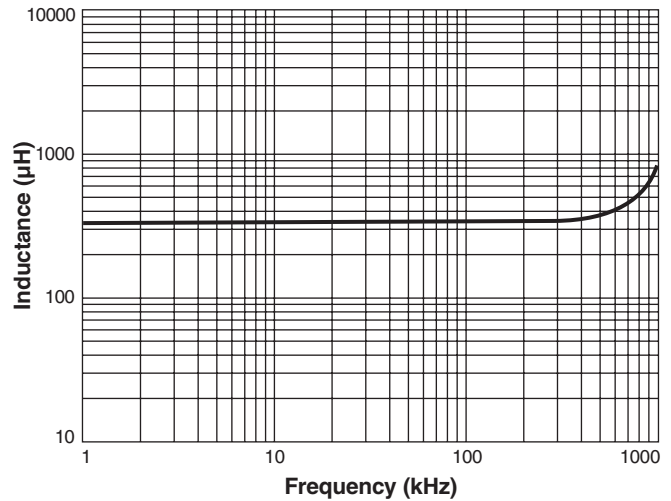

**NEW!**

# SMT PFC Boost Inductor-GA2972-AL

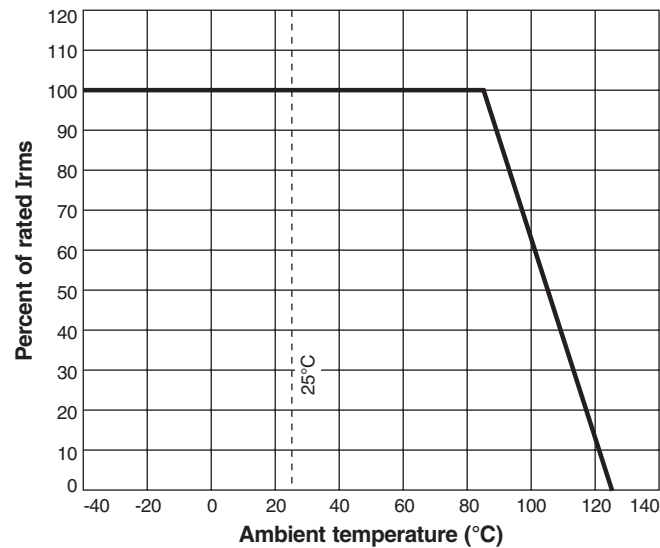
## L vs Current



## L vs Frequency



## Irms Derating



**Coilcraft**®

These parts are preproduction products for electrical evaluation only. Specification subject to change without notice.

Document 657-2 Revised 06/23/08

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>