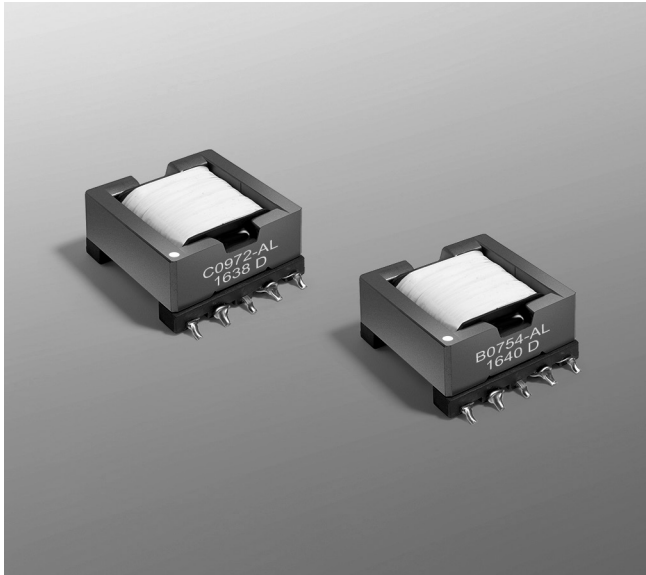




# SMT Power Magnetics

For ON Semiconductor  
NCP1216A Controller



Coilcraft's C0972-AL transformer and B0754-AL inductor were developed specifically for the ON Semiconductor NCP1216A PWM Current-Mode Controller.

They are specified in application note AND8161/D along with Coilcraft's DS3316P-103 and DS3316P-102 shielded inductors. Refer to the separate data sheet for additional information about the DS3316 Series of inductors

The C0972-AL features very low DCR, excellent leakage inductance and 1500 Vrms isolation from the primary and auxiliary windings to the secondary.

The B0754-AL is the output inductor and features four separate windings connected in parallel to minimize power losses and to limit temperature rise.

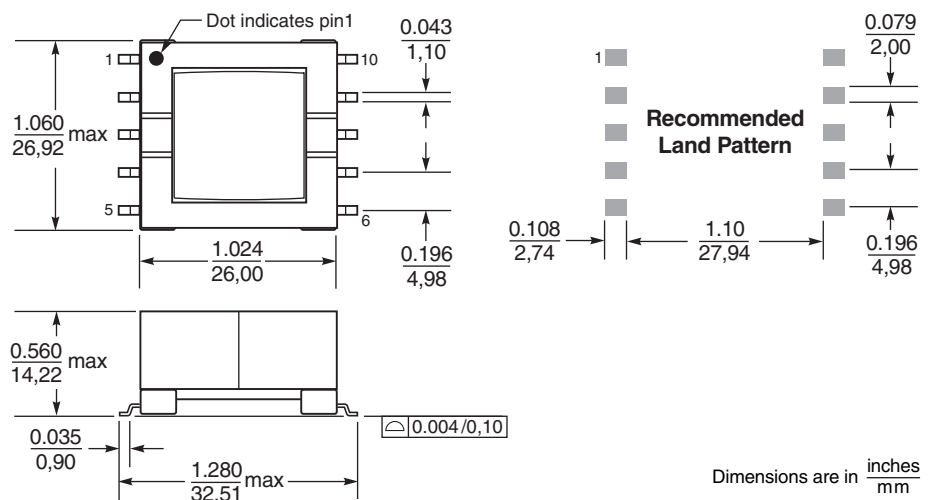
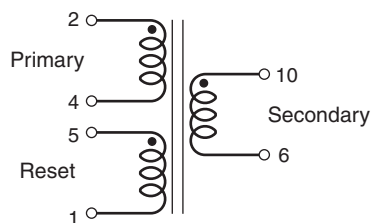
To request free evaluation samples, contact Coilcraft or visit [www.coilcraft.com](http://www.coilcraft.com).

## C0972-AL Transformer

Part number	Output power (W)	Input voltage range (V)	Output voltage (V)	Output current (A rms)	Primary inductance <sup>1</sup> min (mH)	Leakage inductance <sup>2</sup> max (µH)	DCR max (Ohms)	Turns ratio	
								pri:sec	pri:reset
C0972-AL	60	36 – 75	12	5.0	0.817	1.50	0.056 (pri) 0.031 (sec) 0.480 (aux)	1:0.91	1:1

- Inductance measured between pins 2 and 4 at 10 kHz, 0.1 V, 0 Adc.
  - Leakage inductance measured between pins 2 and 4 at 100 kHz, 0.1 V, 0 Adc with all other pins shorted.
  - Operating temperature range: -40°C to +85°C.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**Weight:** 28.2 g  
**Terminations:** Tin-silver (96.5/3.5) over tin over nickel over phos bronze  
**Packaging:** 24 per tray





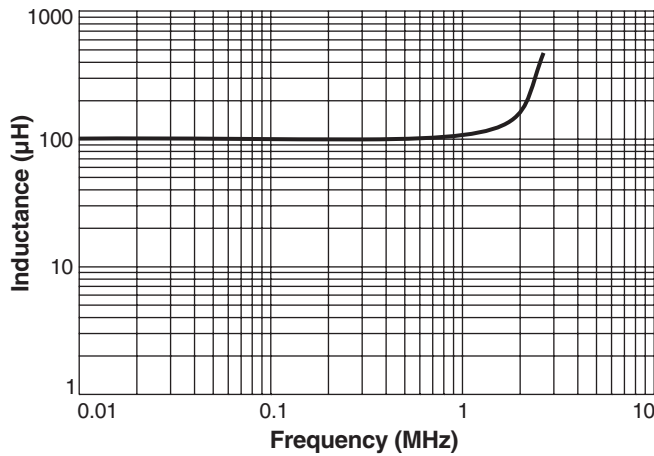
# SMT Power Magnetics for ON Semiconductor NCP1216A

## B0754-AL Inductor

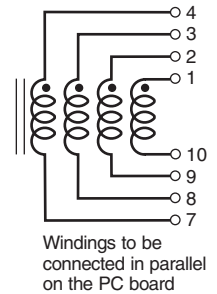
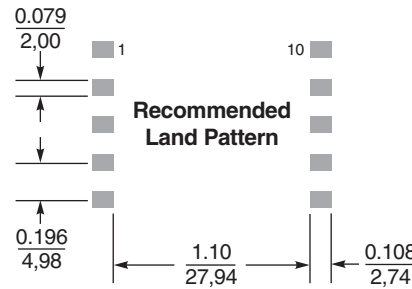
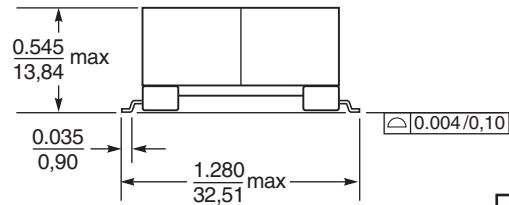
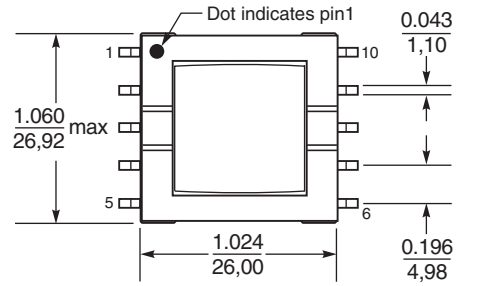
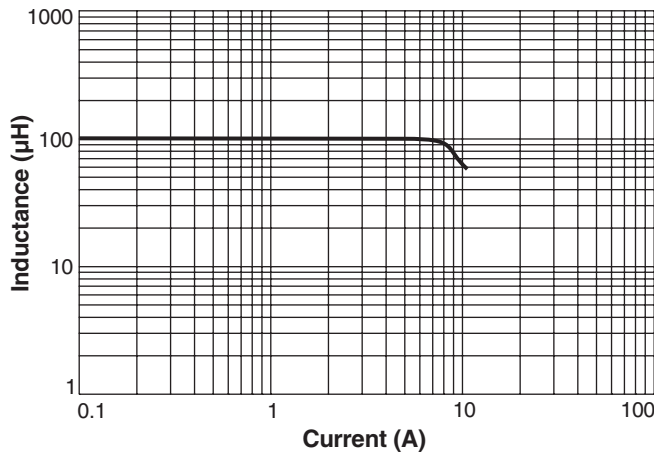
Part number	Inductance <sup>1</sup> at 0 A ±10% (µH)	DCR max <sup>2</sup> (Ohms)	Isat <sup>3</sup> (A)	Irms <sup>4</sup> (A)
B0754-AL	100	0.282	8.0	4.8

1. Inductance measured at 10.0 kHz, 0.1 Vrms.
  2. DCR is per winding.
  3. Current at which inductance drops 10% (typ) from its value without current.
  4. Average current for a 40°C temperature rise above 25°C ambient.
  5. Operating temperature range -40°C to +85°C.
  6. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

### Typical L vs Frequency



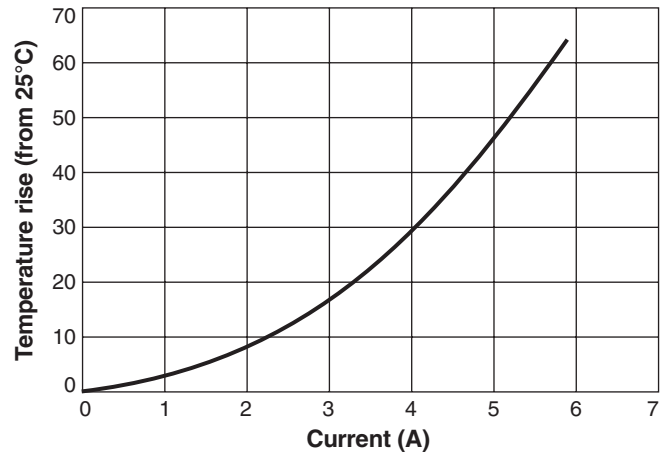
### Typical L vs Current



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

**Weight:** 27.4 g  
**Terminations:** Tin-silver (96.5/3.5) over tin over nickel over phos bronze  
**Packaging:** 24 per tray

### Temperature Rise vs Current



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