



#### Description

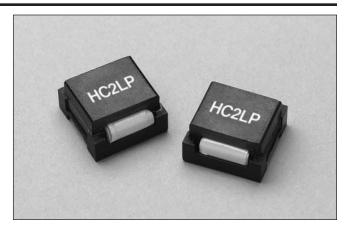
- Compact footprint for high density, high current/low voltage applications
- Foil technology that adds higher reliability factor over the traditional magnet wire used for higher frequency circuit designs
- Frequency Range up to 1MHz
- RoHS compliant (-R option)

#### Applications

- Next generation microprocessors
- Energy storage applications
- DC-DC converters
- Computers

#### **Environmental Data**

- Storage temperature range: -40C to +125C
- Operating ambient temperature range: -40C to +85C (range is application specific).
- Infrared reflow temperature: +260C for 10 seconds max.



### Packaging

4) Values @ 20°C

- Supplied in tape and reel packaging, 44mm width, 130 parts per 13" reel
- 45 parts per tray, bulk packaging also available

worst case operating conditions verified in the end application. 3) Peak current for approximately 30% roll-off

total losses for 40°C temperature rise.

5) Applied Volt-Time product (V-µS) across the inductor. This value represents the

applied V-µS at 300KHz necessary to generate a core loss equal to 10% of the

Part Number	Rated Inductance µH	OCL (1) μH ± 20%	Irms (2) Amperes (Typ.)	Isat (3) Amperes (Typ.)	DCR (4) Ohms (Max.)	Volts (5) µSec
HC2LP-R47	.47	.52	52.9	63.75	.0006	6.87
HC2LP-R68	.68	.63	52.9	50.00	.0006	6.87
HC2LP-1R0	1.0	1.15	33.0	42.50	.0013	10.31
HC2LP-2R2	2.2	2.00	24.3	31.90	.0023	13.75
HC2LP-4R7	4.7	4.55	17.0	21.25	.0046	20.62
HC2LP-6R0	6.0	6.00	17.0	16.50	.0046	20.62

Open Circuit Inductance Test Parameters: 300kHz, 0.250 Vrms, 0.0 Adc
DC current for an approximate temperature change of 40°C without core loss.

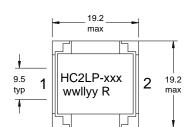
Derating is necessary for AC currents. PCB layout, trace thickness and width, air-flow and proximity of other heat generating components will affect the temperature rise.

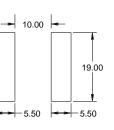
It is recommended that the temperature of the part not exceed 125°C under

OPTION CODE				
Option Code	Description			
-R	RoHS compliant version			

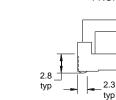
**Mechanical Diagrams** 

#### TOP VIEW





RECOMMENDED PCB PAD LAYOUT



FRONT VIEW

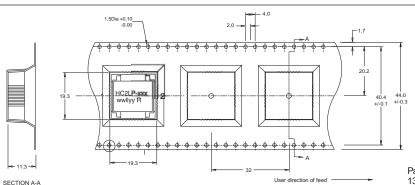
11.18

max





**Packaging Information** 



**Dimensions in Millimeters** 

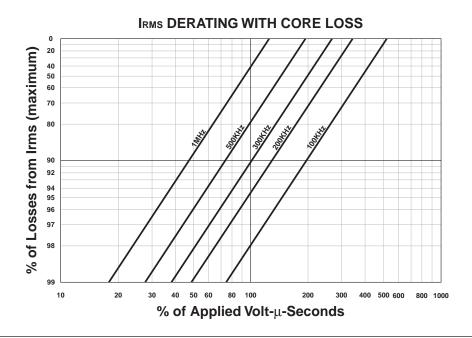
Parts packaged on 13" Diameter reel, 130 parts per reel.

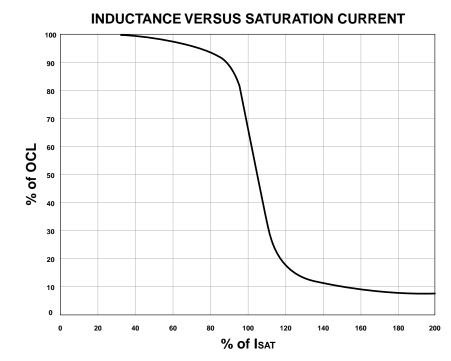
## **HIGH CURRENT 2LP** Low Profile Power Inductors



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HIGH CURRENT 2LP Low Profile Power Inductors





# **COOPER** Bussmann

PM-4114 7/05

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