

# HIGH CURRENT POWER INDUCTORS

## HCB1413 SERIES

### FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 300nH to 680nH
- Current range from 24A to 60A
- Ferrite core material

### OPTIONS:

- Tape & Reel is Standard
- Bulk packaging Available for Smaller Quantities

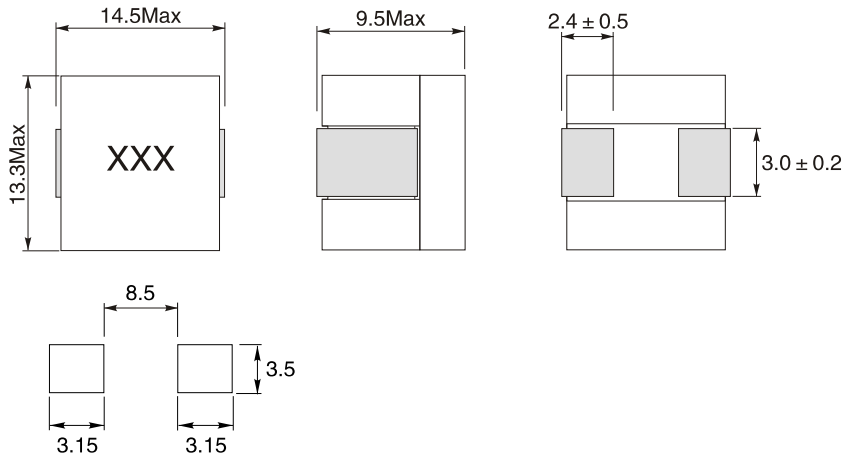
### APPLICATIONS:

- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module(VRM)

### ELECTRICAL CHARACTERISTICS:

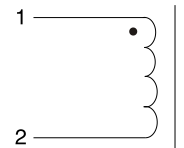
Part Number	Inductance (nH) $\pm 15\%$ @0Adc	Inductance (nH)Min @ Isat	Heat rating current DC Amps Irms(A)	Saturation current DC Amps Isat(A)	DCR@25 °C (m $\Omega$ )
HCB1413R1-R30K	300	240	45	60	0.25 $\pm$ 7%
HCB1413R1-R36K	360	288	45	52	0.25 $\pm$ 7%
HCB1413R1-R45K	450	360	45	43	0.25 $\pm$ 7%
HCB1413R1-R53K	530	424	45	34	0.25 $\pm$ 7%
HCB1413R1-R68K	680	544	45	24	0.25 $\pm$ 7%

### DIMENSIONS(mm) :



Recommended pad layout

### SCHEMATIC :



### NOTES:

- Test Frequency : 100KHz / 0.1V@25°C
- Irms: DC current for an approximate temperature rise of 40°C without core loss
- Isat: Peak current for approximately 20% rolloff at +25°C
- Operating temperature: -40°C to +125°C(ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C