



# HIGH CURRENT POWER INDUCTORS

## HCB1208 SERIES

### FEATURES:

- High current carrying capacity
- Low core loss
- Inductance range from 150nH to 250nH
- Current range from 55A to 85A
- Ferrite core material

### OPTIONS:

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

### APPLICATIONS:

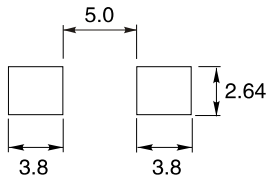
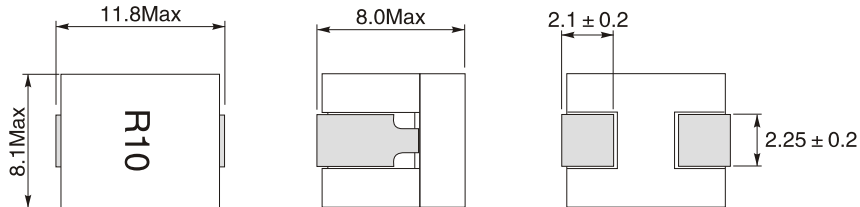
- Portable electronics
- Servers and workstations
- Data networking and storage systems
- Notebook and desktop computers
- Graphics cards and battery power systems
- Multi-phase regulators
- Voltage regulator module(VRM)

### ELECTRICAL CHARACTERISTICS:

| Part Number    | Inductance (nH) $\pm 10\%$ @0Adc | Inductance (nH)Min @Isat1 | Heat rating current DC Amps Irms(A) | Saturation current DC Amps Isat1(A) | Saturation current DC Amps Isat2(A) | DCR@25 °C (m $\Omega$ ) |
|----------------|----------------------------------|---------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------|
| HCB1208R1-R15K | 150                              | 114                       | 50                                  | 85                                  | 72                                  | 0.29 $\pm 5\%$          |
| HCB1208R1-R18K | 180                              | 137                       | 50                                  | 72                                  | 63                                  | 0.29 $\pm 5\%$          |
| HCB1208R1-R21K | 210                              | 160                       | 50                                  | 65                                  | 55                                  | 0.29 $\pm 5\%$          |
| HCB1208R1-R23K | 230                              | 176                       | 50                                  | 61                                  | 50                                  | 0.29 $\pm 5\%$          |
| HCB1208R1-R25K | 250                              | 191                       | 50                                  | 55                                  | 44                                  | 0.29 $\pm 5\%$          |

### DIMENSIONS(mm) :

### SCHEMATIC :



Recommended pad layout

### NOTES:

- Test Frequency : 100KHz / 0.1V@25°C
- Irms: DC current for an approximate temperature rise of 40°C without core loss
- Isat1: Peak current for approximately 20% rolloff at +25°C
- Isat2: Peak current for approximately 20% rolloff at +125°C
- Operating temperature: -40°C to +125°C(ambient plus self-temperature rise)
- Storage temperature: -40°C to +125°C



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### INDUCTANCE CHARACTERISTICS:

