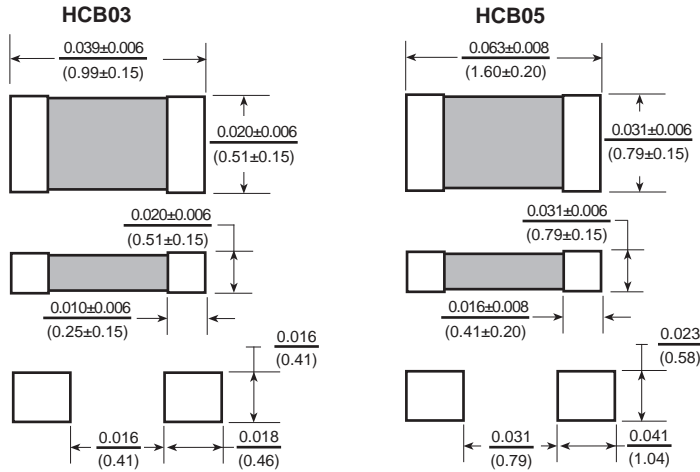


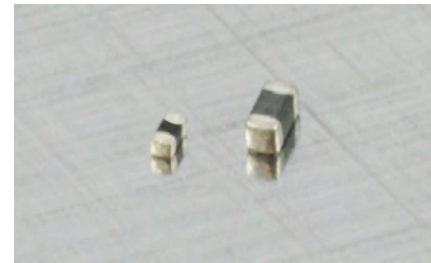


# High Current Beads

# HCB03 thru 05



Dimensions:  $\frac{\text{Inches}}{\text{(mm)}}$



### Features

- 0402 & 0603 Surface mount EMI suppression components
- Nickel barrier termination for excellent resistance to solder heat
- High current capacity
- Wide range of impedance values
- Multi layer technology
- Low DCR
- Flow and reflow soldering

### Electrical

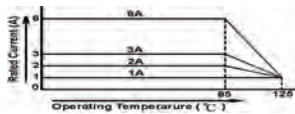
**Impedance Range:** HCB03 10Ω to 1000Ω  
HCB05 10Ω to 1500Ω

**Tolerance:** 25% over entire range

**Operating Temp:** -55°C ~ +125°C

**Storage Temp:** Under 25°C at 40~60% Humidity

**Rate Current:** Based on temp rise not to exceed 30°C  
Rate current is derated as indicated below based on operating temp.



### Resistance to Solder Heat

Pre-Heat 150°C, 1 minute

Solder Composition: Sn/Ag3.0/Cu0.5

Solder Temp: 260±5°C for 10sec ±1 sec.

Minimum of 75% of Electrode covered with new solder.

Impedance within 30% of initial value.

### Test Equipment

(Z): HP4291A RF Impedance/Material Analyzer

(RDC): Chen Hwa 502BC

### Physical

**Packaging:** HCB03 - 10000 per 7 inch reel.

HCB05 - 4000 per 7 inch reel.

**Marking:** None

| Allied Part Number | Impedance (Ω) @ 100 MHz +/- 25% | DC Resistance (Ω) Max. | Rated Current (mA) |
|--------------------|---------------------------------|------------------------|--------------------|
| HCB03              |                                 |                        |                    |
| HCB03-100-RC       | 10                              | 0.03                   | 2000               |
| HCB03-300-RC       | 30                              | 0.05                   | 1700               |
| HCB03-600-RC       | 60                              | .075                   | 1500               |
| HCB03-800-RC       | 80                              | 0.09                   | 1200               |
| HCB03-121-RC       | 120                             | 0.09                   | 1200               |
| HCB03-151-RC       | 150                             | 0.14                   | 900                |
| HCB03-221-RC       | 220                             | 0.18                   | 580                |
| HCB03-601-RC       | 600                             | 0.34                   | 420                |
| HCB03-102-RC       | 1000                            | 0.49                   | 350                |

| Allied Part Number | Impedance (Ω) @ 100 MHz +/- 25% | DC Resistance (Ω) Max. | Rated Current (mA) |
|--------------------|---------------------------------|------------------------|--------------------|
| HCB05              |                                 |                        |                    |
| HCB05-100-RC       | 10                              | 0.02                   | 4000               |
| HCB05-110-RC       | 11                              | 0.02                   | 4000               |
| HCB05-150-RC       | 15                              | 0.03                   | 3000               |
| HCB05-170-RC       | 17                              | 0.03                   | 3000               |
| HCB05-190-RC       | 19                              | 0.03                   | 3000               |
| HCB05-200-RC       | 20                              | 0.03                   | 3000               |
| HCB05-220-RC       | 22                              | 0.03                   | 3000               |
| HCB05-250-RC       | 25                              | 0.03                   | 3000               |
| HCB05-300-RC       | 30                              | 0.03                   | 3000               |
| HCB05-310-RC       | 31                              | 0.03                   | 3000               |
| HCB05-320-RC       | 32                              | .035                   | 3000               |
| HCB05-330-RC       | 33                              | .035                   | 3000               |
| HCB05-400-RC       | 40                              | .035                   | 3000               |
| HCB05-470-RC       | 47                              | 0.04                   | 3000               |
| HCB05-500-RC       | 50                              | 0.04                   | 3000               |
| HCB05-560-RC       | 56                              | 0.04                   | 3000               |
| HCB05-600-RC       | 60                              | 0.04                   | 3000               |
| HCB05-680-RC       | 68                              | 0.05                   | 2500               |
| HCB05-700-RC       | 70                              | 0.05                   | 2500               |
| HCB05-750-RC       | 75                              | 0.05                   | 2500               |
| HCB05-800-RC       | 80                              | 0.05                   | 2500               |
| HCB05-900-RC       | 90                              | 0.05                   | 2500               |
| HCB05-101-RC       | 100                             | 0.05                   | 2500               |
| HCB05-121-RC       | 120                             | 0.08                   | 2500               |
| HCB05-151-RC       | 150                             | .085                   | 2000               |
| HCB05-181-RC       | 180                             | .090                   | 2000               |
| HCB05-201-RC       | 200                             | .095                   | 2000               |
| HCB05-221-RC       | 220                             | 0.10                   | 2000               |
| HCB05-241-RC       | 240                             | 0.12                   | 1500               |
| HCB05-301-RC       | 300                             | 0.12                   | 1500               |
| HCB05-331-RC       | 330                             | 0.12                   | 1500               |
| HCB05-401-RC       | 400                             | 0.12                   | 1500               |
| HCB05-451-RC       | 450                             | 0.15                   | 1500               |
| HCB05-471-RC       | 470                             | 0.15                   | 1500               |
| HCB05-501-RC       | 500                             | 0.15                   | 1200               |
| HCB05-601-RC       | 600                             | 0.20                   | 1000               |
| HCB05-701-RC       | 700                             | 0.25                   | 800                |
| HCB05-751-RC       | 750                             | 0.25                   | 800                |
| HCB05-801-RC       | 800                             | 0.25                   | 800                |
| HCB05-102-RC       | 1000                            | 0.25                   | 800                |
| HCB05-152-RC       | 1500                            | 0.40                   | 500                |

All specifications subject to change without notice.