High Current Beads

HCB05

**Dimensions:**

- **Inches (mm)**
  - 0.060 x 0.010 (1.6 x 0.25)
  - 0.00069 x 0.0079 (0.021 x 0.020)
  - 0.031 x 0.007 (0.8 x 0.2)
  - 0.011 x 0.007 (0.3 x 0.2)
  - 0.023 (0.58)
  - 0.031 (0.79)
  - 0.041 (1.04)

**Features**

- 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:** HCB05 10Ω to 1500Ω
- **Tolerance:** ±25% over entire range
- **Operating Temp:** -55ºC ~ +125ºC
- **Storage Temp:** Under 25ºC at 40~60% Humidity
- **Rate Current:** Based on temp rise not to exceed 30ºC
  
  Rate current is derated as indicated below based on operating temp.

<table>
<thead>
<tr>
<th>Allied Part Number</th>
<th>Impedance (Ω) @ 100MHz ±25%</th>
<th>DCR (Ω Max)</th>
<th>Rated Current (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCB05-100-RC</td>
<td>10</td>
<td>0.02</td>
<td>4000</td>
</tr>
<tr>
<td>HCB05-110-RC</td>
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<td>HCB05-190-RC</td>
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</table>

**All specifications subject to change without notice.**

**Test Equipment**

- (Z): HP4291A RF Impedance/Material Analyzer
- (RDC): Chen Hwa 502BC

**Physical**

- **Packaging:** 4000pcs per 7 inch reel.
- **Marking:** None

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**Resistance to Solder Heat**

- **Pre-Heat:** 150ºC, 1 minute
- **Solder Composition:** Sn/Ag 3.0/Cu 0.5
- **Solder Temp:** 260±5ºC for 10sec ±1 sec.
- Minimum of 75% of Electrode covered with new solder.
- Impedance within 30% of initial value.