High Current Beads

HCB05KF

Dimensions:

inch

(mm)

0.062±0.006
(1.60±0.15)

0.031±0.006
(0.8±0.15)

0.012±0.008
(0.3±0.20)

0.033
(0.85)

0.041
(0.80)

Recommended PCB Layout

<table>
<thead>
<tr>
<th>Allied Part Number</th>
<th>Impedance (Ω)</th>
<th>Test Frequency (MHz)</th>
<th>DCR (Ω Max)</th>
<th>Rated Current (mA) Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCB05KF-300-RC</td>
<td>30</td>
<td>100</td>
<td>0.04</td>
<td>3000</td>
</tr>
<tr>
<td>HCB05KF-800-RC</td>
<td>80</td>
<td>100</td>
<td>0.04</td>
<td>2000</td>
</tr>
<tr>
<td>HCB05KF-121-RC</td>
<td>120</td>
<td>100</td>
<td>0.10</td>
<td>2000</td>
</tr>
<tr>
<td>HCB05KF-151-RC</td>
<td>150</td>
<td>100</td>
<td>0.10</td>
<td>2000</td>
</tr>
<tr>
<td>HCB05KF-221-RC</td>
<td>220</td>
<td>100</td>
<td>0.10</td>
<td>2000</td>
</tr>
<tr>
<td>HCB05KF-301-RC</td>
<td>300</td>
<td>100</td>
<td>0.10</td>
<td>2000</td>
</tr>
<tr>
<td>HCB05KF-471-RC</td>
<td>470</td>
<td>100</td>
<td>0.20</td>
<td>1000</td>
</tr>
<tr>
<td>HCB05KF-601-RC</td>
<td>600</td>
<td>100</td>
<td>0.20</td>
<td>1000</td>
</tr>
</tbody>
</table>

All specifications subject to change without notice.

Features

- 0603 Surface mount EMI suppression components
- High current capacity
- Wide range of impedance values
- Multi layer technology
- Flow and reflow solderable
- Halogen free

Electrical

Impedance Range: 30Ω to 600Ω
Tolerance: 25% over entire range
Operating Temp: -40°C to +125°C
Storage Temp: -40°C to +125°C
Rated Current: Based on temp rise not to exceed 30°C.

Resistance to Solder Heat

Pre-Heat: 150°C, 60sec
Solder Composition: Sn96.5%/Ag3% Cu0.5%
Solder Temp: 245±5°C
Flux for lead free: Rosin 9.5%
Depth: Completely cover the termination
Dip Time: 4 ±1sec

Test Equipment

(1): HP4291A RF Impedance/Material Analyzer
(2): Chen Hwa 502BC

Physical

Packaging: 4000pcs per 7 inch reel
Marking: None

Derating Curve

Environment Temperature + △ Temperature (°C)
Impedance Frequency Characteristics (Typical)

HCB05KF-300-RC

HCB05KF-800-RC

HCB05KF-121-RC

HCB05KF-151-RC

HCB05KF-221-RC

HCB05KF-301-RC

HCB05KF-471-RC

HCB05KF-601-RC
HCB05KF

Packaging

Reel Dimensions

<table>
<thead>
<tr>
<th>A(mm)</th>
<th>B(mm)</th>
<th>C(mm)</th>
<th>D(mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.0±0.5</td>
<td>60±2</td>
<td>13.5±0.5</td>
<td>178±2</td>
</tr>
</tbody>
</table>

Tape Dimensions

<table>
<thead>
<tr>
<th>Size</th>
<th>Bo(mm)</th>
<th>Ao(mm)</th>
<th>Ko(mm)</th>
<th>P(mm)</th>
<th>t(mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>160808</td>
<td>1.80±0.05</td>
<td>0.96±0.05-0.03</td>
<td>0.95±0.05</td>
<td>4.0±0.10</td>
<td>0.95±0.05</td>
</tr>
</tbody>
</table>

Tearing Off Force

The force for tearing off cover tape is 15 to 60 grams in the arrow direction under the following conditions.

<table>
<thead>
<tr>
<th>Room Temp. (°C)</th>
<th>Room Humidity (%)</th>
<th>Room atm (hPa)</th>
<th>Tearing Speed mm/min</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-35</td>
<td>45-85</td>
<td>860-1060</td>
<td>300</td>
</tr>
</tbody>
</table>