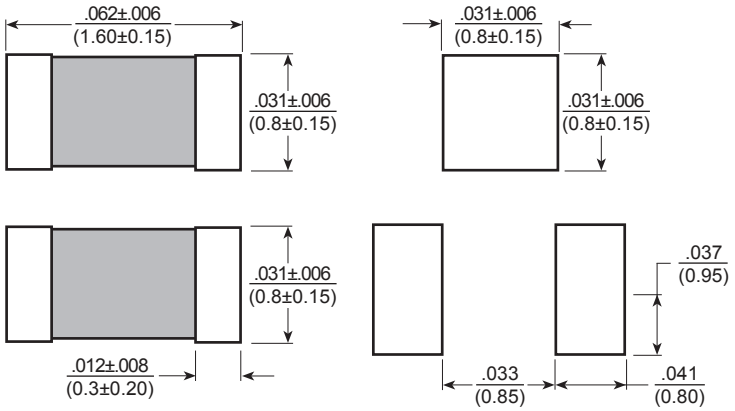
RoHS

# High Current Beads

# HCB05KF

**Dimensions:** inch / (mm)






**Recommended PCB Layout**

| Allied Part Number | Impedance (Ω) 25% | Test Frequency (MHz) | DCR (Ω Max) | Rated Current (mA) Max |
|---|---|---|---|---|
| HCB05KF-300-RC | 30 | 100 | 0.04 | 3000 |
| HCB05KF-800-RC | 80 | 100 | 0.04 | 3000 |
| HCB05KF-121-RC | 120 | 100 | 0.10 | 2000 |
| HCB05KF-151-RC | 150 | 100 | 0.10 | 2000 |
| HCB05KF-221-RC | 220 | 100 | 0.10 | 2000 |
| HCB05KF-301-RC | 300 | 100 | 0.10 | 2000 |
| HCB05KF-471-RC | 470 | 100 | 0.20 | 1000 |
| HCB05KF-601-RC | 600 | 100 | 0.20 | 1000 |

All specifications subject to change without notice.

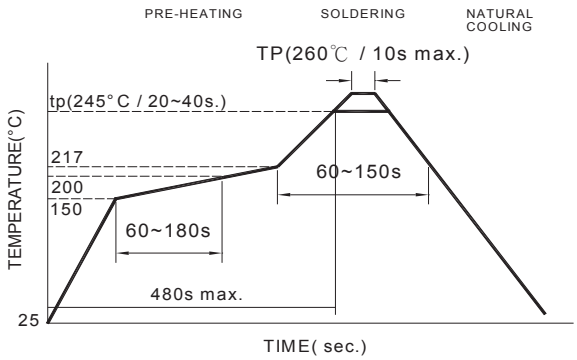
## Features

- 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:** -40ºC to +125ºC
**Storage Temp:** -40ºC to +125ºC
**Rated Current:** Based on temp rise not to exceed 30ºC.

## Reflow Solder Profile




Reflow times: 3 times max

## Resistance to Solder Heat

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

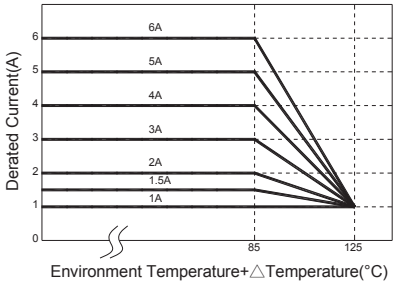
## Test Equipment

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

## Physical

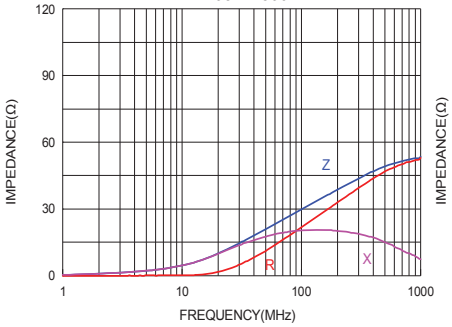
**Packaging:** 4000pcs per 7 inch reel
**Marking:** None

## Derating Curve

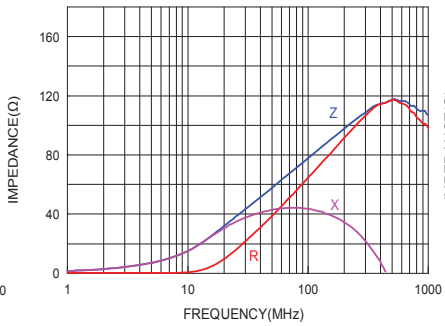


## Impedance Frequency Characteristics (Typical)

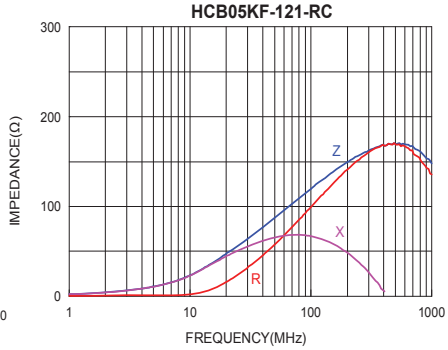
HCB05KF-300-RC



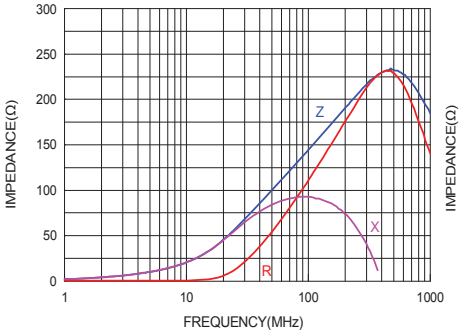

HCB05KF-800-RC



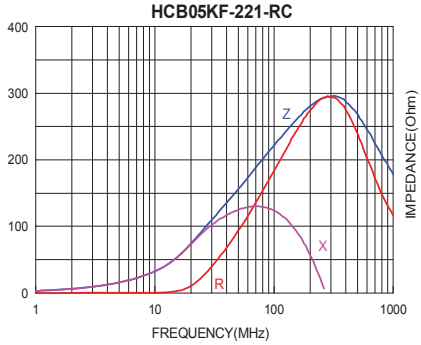

HCB05KF-121-RC



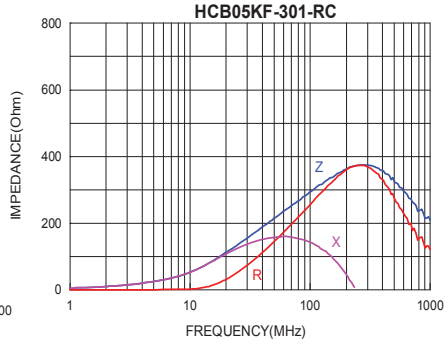

HCB05KF-151-RC



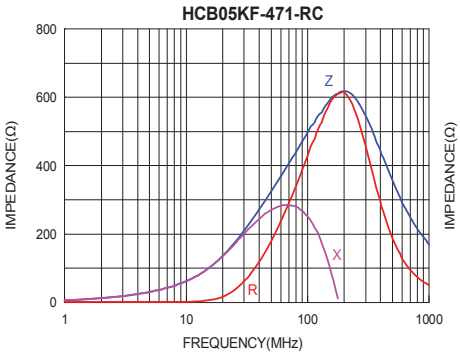

HCB05KF-221-RC



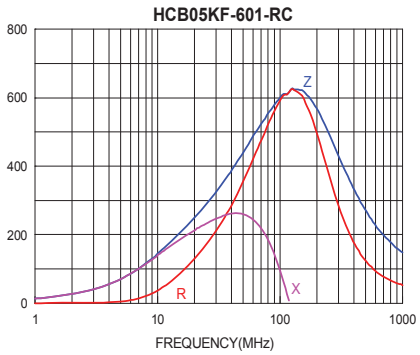

HCB05KF-301-RC



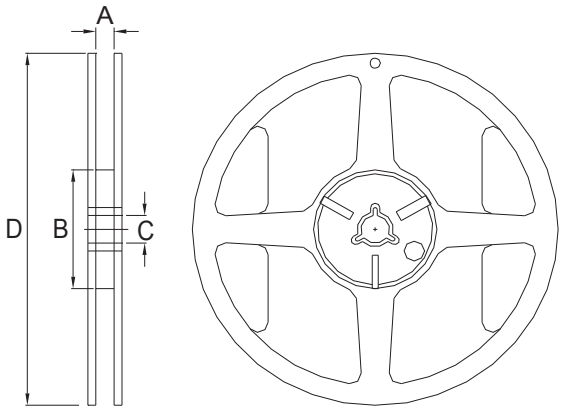

HCB05KF-471-RC




HCB05KF-601-RC



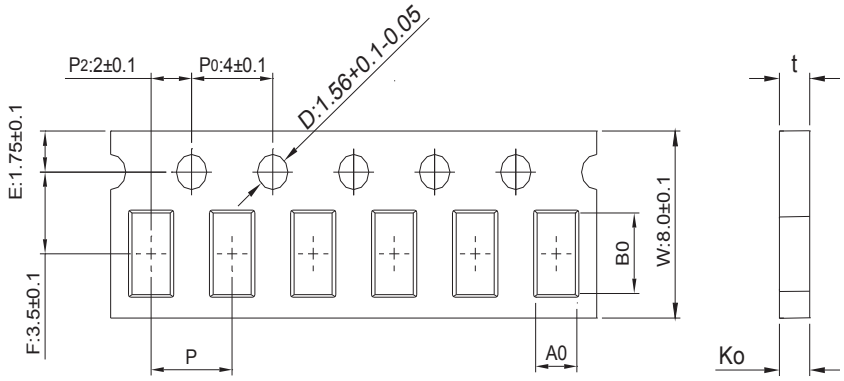
# Packaging




7"x8mm

**Reel Dimensions**

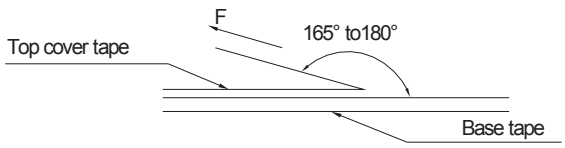
| A(mm) | B(mm) | C(mm) | D(mm) |
|---|---|---|---|
| 9.0±0.5 | 60±2 | 13.5±0.5 | 178±2 |




**Tape Dimensions**

| Size | Bo(mm) | Ao(mm) | Ko(mm) | P(mm) | t(mm) |
|---|---|---|---|---|---|
| 160808 | 1.80±0.05 | 0.96+0.05/-0.03 | 0.95±0.05 | 4.0±0.10 | 0.95±0.05 |

**Tearing Off Force**




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

| Room Temp. (℃) | Room Humidity (%) | Room atm (hPa) | Tearing Speed mm/min |
|---|---|---|---|
| 5~35 | 45~85 | 860~1060 | 300 |