COILS-TECH

HCB1005 Series

High Current Ferrite Chip Bead

Ferrite Chip Bead Offer High Frequency Noise Suppression in High Current DC power Lines.

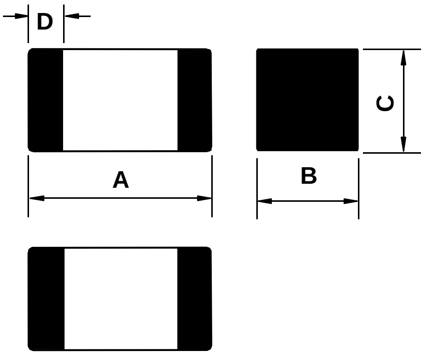
FEATURES

Closed Magnetic circuit structure allows high density mounting while preventing crosstalk.
Extremely high reliability due to entirely monolithic construction.
Low DC resistance structure of electrode to prevent wasteful electric power consumption.
High Current rating up to 6A.
The products contain no lead and also support lead-free soldering.

APPLICATIONS

Personal computers,Communication equipment,Digital telephone,Electronic games machines,CRTs,Hard disk drives,cellular phones,PDAs,Printers High current DC lines and other computer peripheral products.

DIMENSIONS

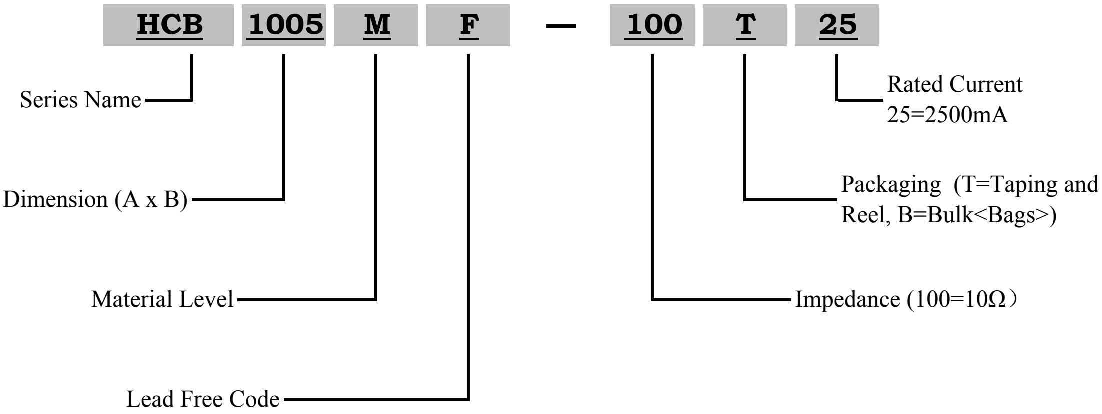


Chip Size:1005

A	B	C	D
1.0±0.10	0.50±0.10	0.50±0.10	0.25±0.10

All dimensions in units:mm

PART NUMBERING

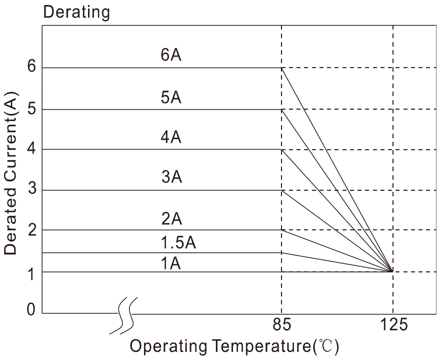


SPECIFICATION

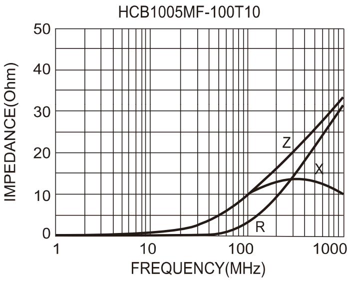
Part Number	Impedance (Ohm)	Test Frequency (MHz)	Rated Current (mA)max.	DCR (Ohm)max.
HCB1005MF-100T25	10±25%	100	2500	0.05
HCB1005KF-121T20	120±25%	100	2000	0.095
HCB1005KF-221T15	220±25%	100	1500	0.15

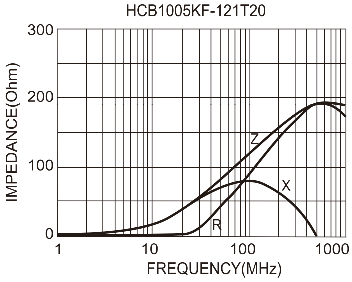
Derating Curve

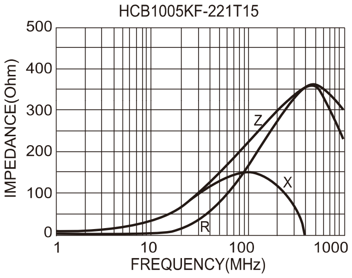
For the ferrite chip bead which withstanding current over 1.5A, as the operating temperature over 85℃, the derating current information is necessary to consider with. For the detail derating of current, please refer to the Derated Current vs. Operating Temperature curve.



Typical Impedance V.s. Frequency Curve



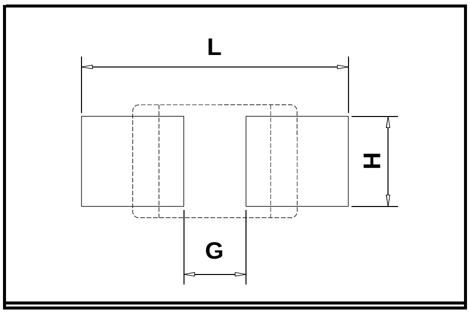


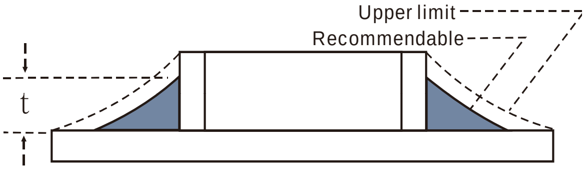


SOLDERING AND MOUNTING

RECOMMENDED PC BOARD PATTERN

Land Patterns For Reflow Soldering			
Size	L(mm)	G(mm)	H(mm)
1005	2.10	0.50	0.55

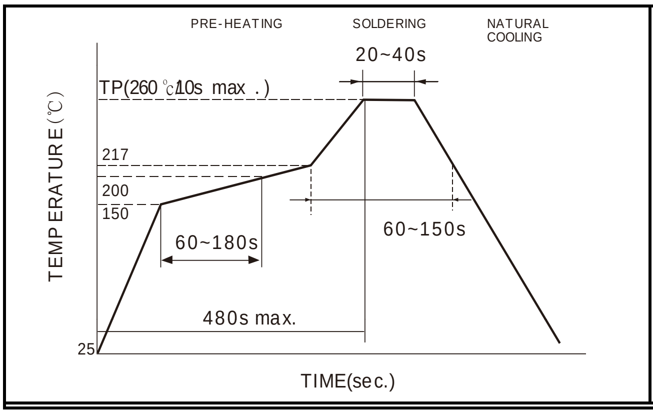




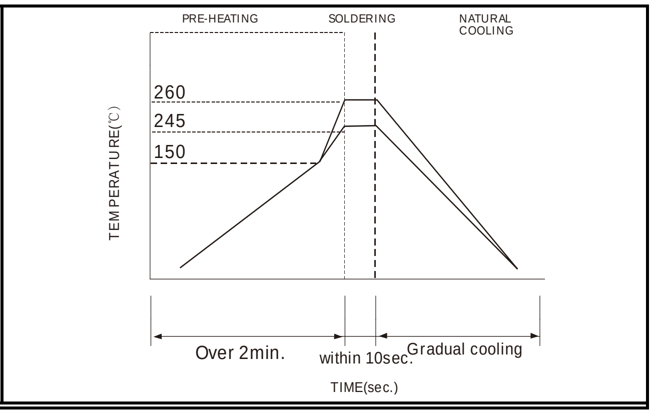
Accordingly increasing the solder volume, the mechanical stress to product is also increased. Exceeding solder volume may cause the failure of mechanical or eletrical performance. Solder shall be used not to be exceed as shown in left side.

RECOMMENDED SOLDERING CONDITIONS

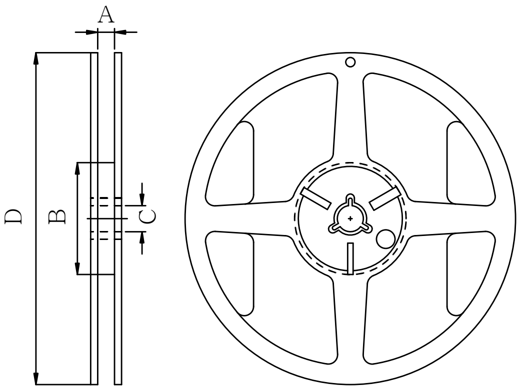
Reflow Soldering



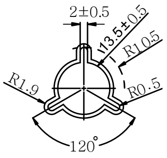
Wave Soldering



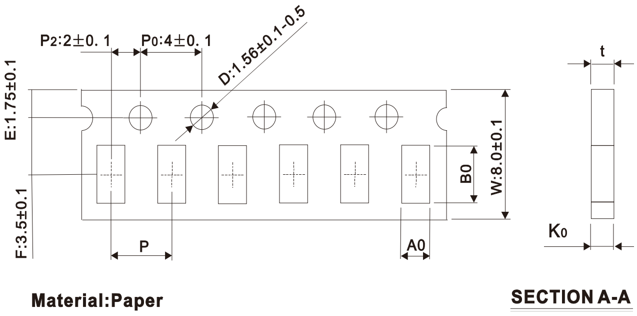
PACKAGING INFORMATION



7"x8mm



Type	A(mm)	B(mm)	C(mm)	D(mm)
7" x 8mm	9±0.5	60±2	13.5±0.5	178±2



Size	B0 (mm)	A0 (mm)	K0 (mm)	P (mm)	t (mm)
100505	1.12±0.03	0.62±0.03	0.60±0.03	2.0±0.10	0.60±0.03

PACKAGING QUANTITY

Size	Chip/Reel	Inner Box	Middle Box	Carton
100505	10000	50000	250000	500000

Application Notice

●Storage Conditions
To maintain the solderability of terminal electrodes:
1. Temperature and humidity conditions:-10~40℃ and 30~70% RH.
2. Recommended products should be used within 6 months from the time of delivery.
3. The packaging material should be kept where on chlorine or sulfur exists in the air.
●Transportation
1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.