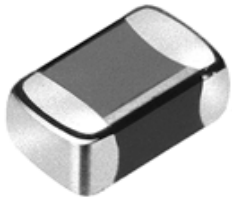
Chilisin Electronics Singapore Pte Ltd

High Current Chip Beads, HCC Series



Feature:

Our SMD High Current Chips Beads is specially designed to with Stand large Currents while providing a means of EMI/RFI attenuation for electronics products. Its has a full range different sizes to choose from.

Ordering Code:

HCC - 160808 - □□□ - □

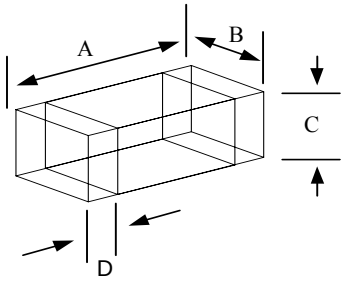
Type

Size

Internal

Material

Dimension in mm:



Type	A	B	C	D
HCC - 160808	1.6 ± 0.2	0.8 ± 0.15	0.8 ± 0.15	0.4 ± 0.2
HCC - 201209	2.0 ± 0.2	1.25 ± 0.2	0.9 ± 0.2	0.5 ± 0.3
HCC - 321611	3.2 ± 0.2	1.6 ± 0.2	0.6 ± 0.2	0.5 ± 0.3
HCC - 451616	4.5 ± 0.25	1.6 ± 0.2	1.6 ± 0.2	0.5 ± 0.3
HCC - 453215	4.5 ± 0.25	3.2 ± 0.2	1.5 ± 0.2	0.5 ± 0.3

Electrical:

Part Number	Impedance	Current
HCC-160808 - Series	11 Ω to 25 Ω	5000 mA to 4000 mA
HCC-201209 - Series	11 Ω to 80 Ω	5000 mA to 4000 mA
HCC-321611 - Series	26 Ω to 90 Ω	6000 mA to 5000 mA
HCC-451616 - Series	60 Ω to 80 Ω	6000 Ma to 5000 mA
HCC-453215 - Series	70 Ω to 120 Ω	6000 mA to 4000 mA

⇒ **General Component Specification**
⇒ **Tape and Reel**

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Electrical:

Part Number	Impedance (ohm)	Test Frequency (MHz)	DC Resistance (ohms) Max	Rated Current (mA) Max
HCC – 160808 - 110	11 ± 25%	100	0.015 Ω	5000
HCC – 160808 - 250	25 ± 25%	100	0.015 Ω	4000
HCC – 201209 - 110	11 ± 25%	100	0.010Ω	6000
HCC – 201209 - 320	32 ± 25%	100	0.025Ω	4000
HCC – 201209 - 600	60 ± 25%	100	0.025Ω	4000
HCC – 201209 - 800	80 ± 25%	100	0.030Ω	4000
HCC – 321611 - 260	26 ± 25%	100	0.015Ω	6000
HCC – 321611 - 320	32 ± 25%	100	0.015Ω	6000
HCC – 321611 - 500	50 ± 25%	100	0.020Ω	5000
HCC – 321611 - 700	70 ± 25%	100	0.020Ω	5000
HCC – 321611 – 800	80 ± 25%	100	0.025Ω	5000
HCC – 321611 - 900	90 ± 25%	100	0.030Ω	5000
HCC – 451616 – 600	60 ± 25%	100	0.020Ω	6000
HCC – 451616 – 700	70 ± 25%	100	0.025Ω	6000
HCC – 451616 – 800	80 ± 25%	100	0.025Ω	5000
HCC – 453215 – 700	70 ± 25%	100	0.030Ω	6000
HCC – 453215 – 121	120 ± 25%	100	0.030Ω	4000

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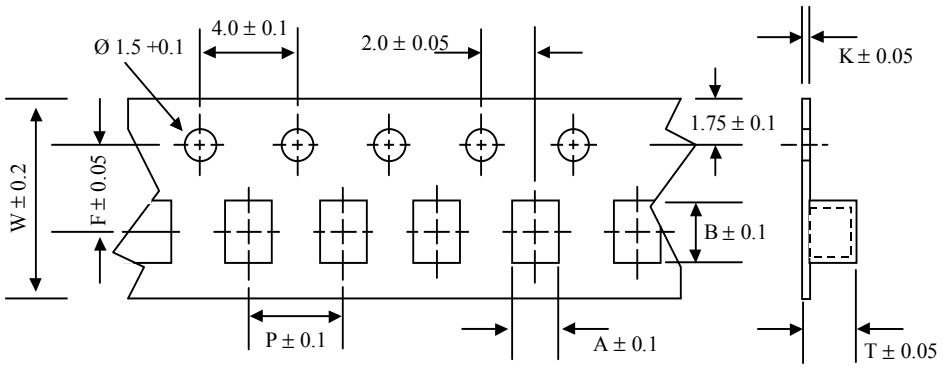
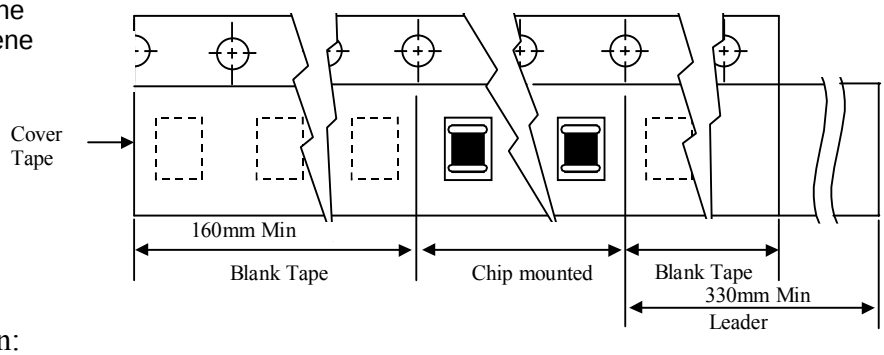
Tape Dimensions:



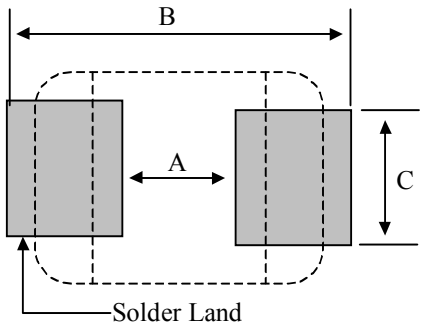
Type	A	B	T	W	P	F	K
HCC-160808	1.14	1.75	1.15	8.0	4.0	3.5	0.2
HCC-201209	1.54	2.32	1.15	8.0	4.0	3.5	0.2
HCC-321611	1.94	2.54	1.29	8.0	4.0	3.5	0.2
HCC-451616	1.94	4.94	1.90	12.0	4.0	5.5	0.3
HCC-453215	3.64	4.94	1.80	12.0	8.0	5.5	0.3

Tape Material:

Carrier Tape: Polystyrene
Cover Type : Polyethylene



Recommended Pattern:



Type	A	B	C
HCC-160808	0.8	2.4 ~ 3.4	0.6
HCC-201209	1.2	3.0 ~ 4.0	1.0
HCC-321611	2.0	4.2 ~ 5.2	1.2
HCC-451616	3.0	5.5 ~ 6.5	1.2
HCC-453215	3.0	5.5 ~ 6.5	2.4

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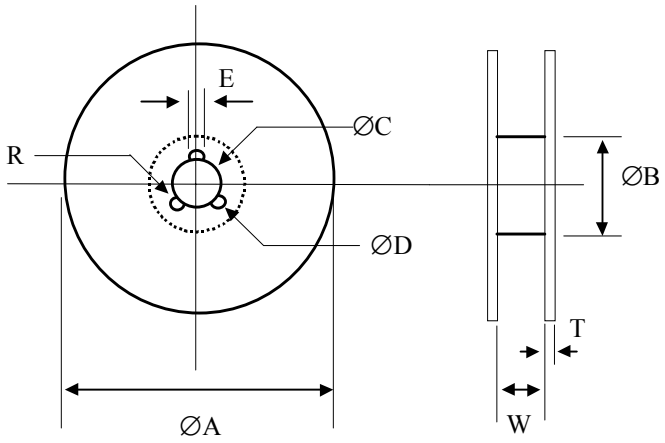
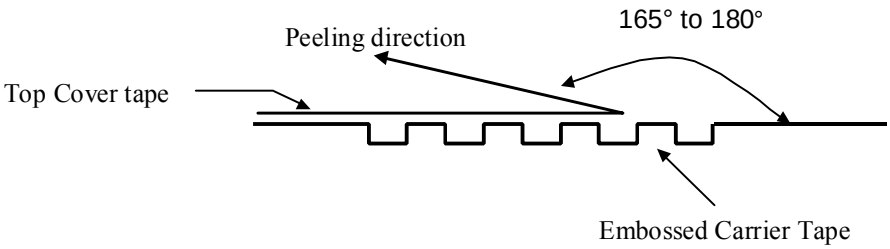
Reel Dimensions:



ØA	ØB	ØC	ØD	E	W	T	R
178 ±2	60 ± 1	13.0 ± 0.5	21.0 ± 0.8	2.0 ± 0.5	10.0 ± 1.0	2.0 ± 0.5	1.0

Tape peeling:



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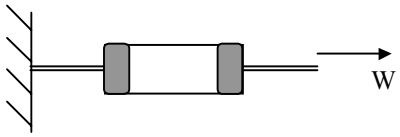
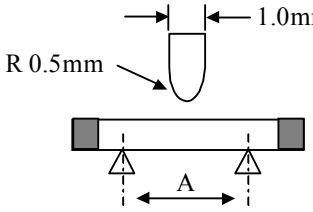
General Component Specification for Chips Beads

Reliability Test (Mechanical Performance Test)

No.	Item	Specification	Test Condition
1.	Solderability	More than 90% of the terminal electrode shall be covered with fresh solder	Pre heat: 100°C to 150°C Pre heat Time: 1 minute Solder: H63A (Eutectic Solder) Solder Temperature: 230 ± 5°C Flux: Rosin Dip Time: 3 ± 1 seconds
2.	Soldering Heat Resistance	The chips shall not crack. More than 75% of the Terminal Electrode shall be covered with solder	Pre heat: 100°C to 150°C Pre heat Time: 1 minute Solder: H63A (Eutectic Solder) Solder Temperature: 260 ± 5°C Flux: Rosin Dip Time: 10 ± 1 seconds
3.	Terminal Strength	The terminal electrode shall not break off nor the ferrite damage 	Type / Kgf (min) / Time 1608 / 0.6 kg / 30 sec ± 5 Sec 2012 / 0.6 kg 3216 / 1.0 kg others / 1.5 kg
4.	Bending strength	The ferrite shall not be damaged by force applied per test condition on the right 	Type / A (mm) / Kgf 1608 / 1.0 / 0.6 2012 / 1.4 / 1.0 321611 / 2.0 / 2.0 451616 / 2.5 / 2.5 453215 / 2.7 / 2.5

Reliability Test (Climatic Test)

No	Item	Specification	Test Condition
5.	Thermal Shock (Temperature cycle)	Impedance value shall be within ±20% of the initial value. DCR shall be within ±20% of initial value	Temperature: -55°C +125°C for 30 minutes, 50 Cycles
6.	Humidity Resistance		Temperature: +60°C ± 2°C Humidity: 90% to 95% Time 1000 ± 12 Hours
7.	High Temperature Resistance		Temperature: +80°C ± 2°C Humidity: 20% Time 1000 ± 12 Hours

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