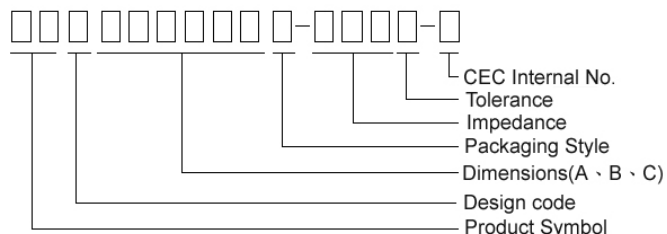


Multilayer Ferrite Chip Beads



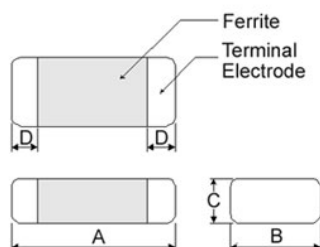
Chilisin offers a wide range of multi-layered ferrite chip beads with various sizes, frequency characteristics, and impedance values for EMI solutions. These ferrite formulas are used to compose seven types of EMI suppression chip beads: SB, GB, PB, UPB, NB, HF, and VPB series.

Product Identification



- Product symbol: SB, GB, PB, UPB, NB, HF, VPB
- Packaging: T : Tape and Reel ; B : Bulk
- Tolerance: Y = $\pm 25\%$; M = $\pm 20\%$; T: $\pm 30\%$
- Note: RoHS Compliant

Shape and Dimensions



Dimensions in mm

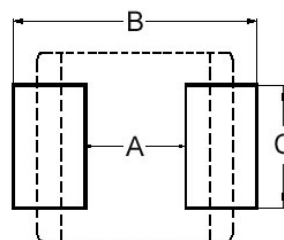
TYPE	A	B	C	D
①060303	0.6 $\pm$ 0.03	0.30 $\pm$ 0.03	0.3 $\pm$ 0.03	0.15 $\pm$ 0.05
②100505	1.0 $\pm$ 0.10	0.50 $\pm$ 0.10	0.5 $\pm$ 0.10	0.25 $\pm$ 0.10
③160808	1.6 $\pm$ 0.15	0.80 $\pm$ 0.15	0.8 $\pm$ 0.15	0.3 $\pm$ 0.2
④201209	2.0 $\pm$ 0.20	1.25 $\pm$ 0.20	0.9 $\pm$ 0.20	0.5 $\pm$ 0.3
⑤201212	2.0 $\pm$ 0.20	1.25 $\pm$ 0.20	1.25 $\pm$ 0.20	0.5 $\pm$ 0.3
④321611	3.2 $\pm$ 0.20	1.60 $\pm$ 0.20	1.1 $\pm$ 0.20	0.5 $\pm$ 0.3
⑥321616	3.2 $\pm$ 0.20	1.60 $\pm$ 0.20	1.6 $\pm$ 0.20	0.5 $\pm$ 0.3
⑦322513	3.2 $\pm$ 0.20	2.50 $\pm$ 0.20	1.3 $\pm$ 0.20	0.5 $\pm$ 0.3
⑧451616	4.5 $\pm$ 0.25	1.60 $\pm$ 0.20	1.6 $\pm$ 0.20	0.5 $\pm$ 0.3
⑧453215	4.5 $\pm$ 0.25	3.20 $\pm$ 0.20	1.5 $\pm$ 0.20	0.5 $\pm$ 0.3

- ① : SB / PB / NB ② : SB / PB / NB / HF ⑦ : SB / PB
 ③ : SB / PB / NB / GB / UPB / HF / VPB ⑤ : UPB ⑥ : SB
 ④ : SB / PB / NB / GB / UPB ⑧ : PB / UPB

Dimension Conversion

Code	Dimension in mm (AxBxC)	EIA
060303	0.6X0.3X0.3	0201
100505	1.0X0.5X0.5	0402
160808	1.6x0.8x0.8	0603
201209	2.0x1.2x0.9	0805
201212	2.0x1.2x1.25	0805
321611	3.2x1.6x1.1	1206
321616	3.2x1.6x1.6	1206
322513	3.2x2.5x1.3	1210
451616	4.5x1.6x1.6	1806
453215	4.5x3.2x1.5	1812

Recommended Pattern



Dimensions in mm

TYPE	A	B	C
①060303	0.2 ~ 0.3	0.75 ~ 1.05	0.3
②100505	0.4	1.2 ~ 1.4	0.5
③160808	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
④201209	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
⑤201212	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
④321611	2.0	4.2 ~ 5.2	1.2
⑥321616	2.0	4.2 ~ 5.2	1.2
⑦322513	2.0	5.5 ~ 6.5	1.8
⑧451616	3.0	5.5 ~ 6.5	1.2
⑧453215	3.0	5.5 ~ 6.5	2.4

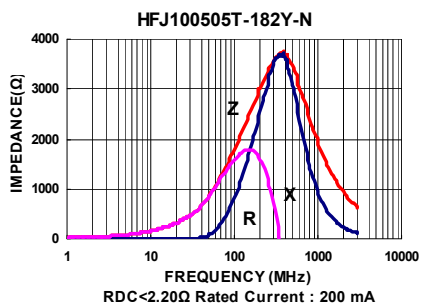
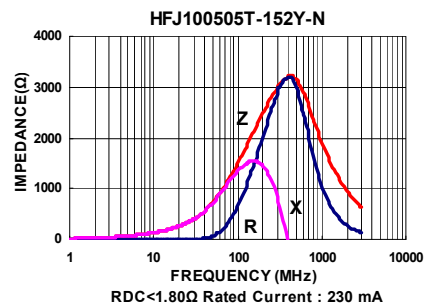
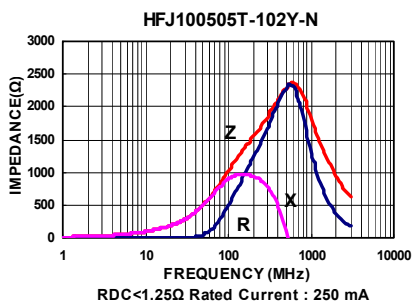
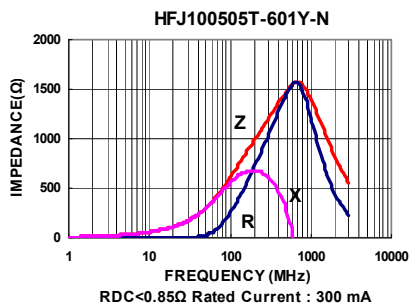
- * Don't apply narrower pattern than listed above to PB and UPB. Narrow pattern might cause excessive heat or open circuit.

SMD Multilayer Ferrite Chip Beads – HFJ Series

Electrical Characteristics

Part Number	Test Frequency (MHz)	Impedance ($\Omega \pm 25\%$)	Test Frequency (MHz)	Impedance ($\Omega \pm 40\%$)	DC Resistance (Ω) Max	Rated current (mA) Max
HFJ100505T-601Y-N	100	600	1000	1400	0.85	300
HFJ100505T-102Y-N	100	1000	1000	2000	1.25	250
HFJ100505T-152Y-N	100	1500	1000	2400	1.80	230
HFJ100505T-182Y-N	100	1800	1000	2700	2.20	200

Test Instruments : Agilent E4991A Impedance / Material Analyzer

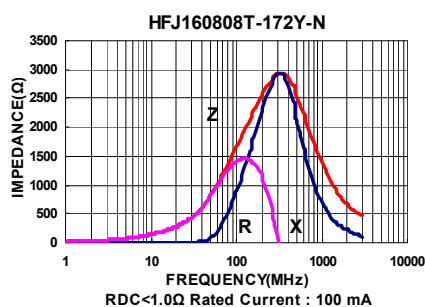
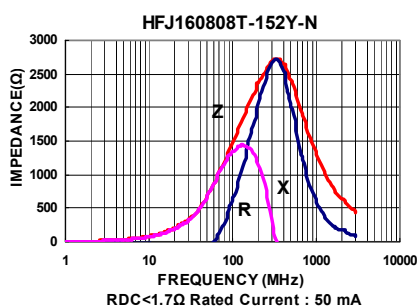
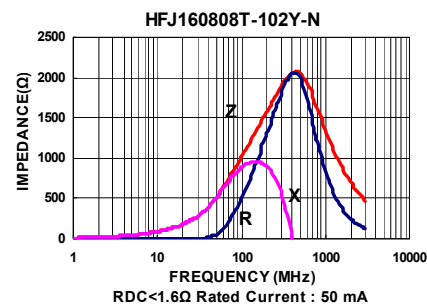
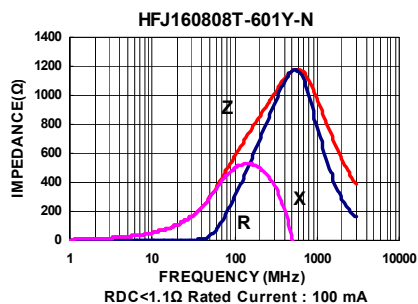
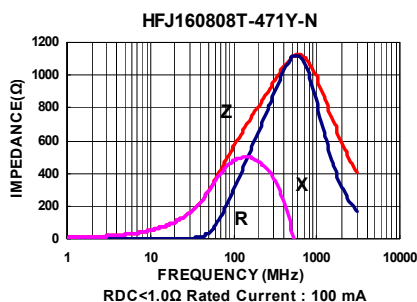


SMD Multilayer Ferrite Chip Beads – HFJ Series

Electrical Characteristics

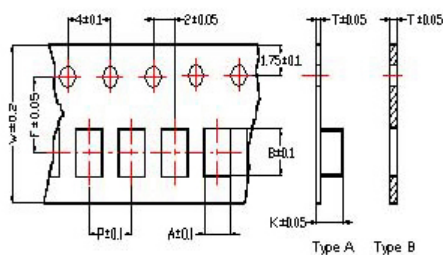
Part Number	Test Frequency (MHz)	Impedance ($\Omega \pm 25\%$)	Test Frequency (MHz)	Impedance ($\Omega \pm 40\%$)	DC Resistance (Ω) Max	Rated current (mA) Max
HFJ160808T-471Y-N	100	470	1000	1000	1.0	100
HFJ160808T-601Y-N	100	600	1000	1200	1.1	100
HFJ160808T-102Y-N	100	1000	1000	1200	1.6	50
HFJ160808T-152Y-N	100	1500	1000	1500	1.7	50
HFJ160808T-172Y-N	100	1700	1000	1700	1.6	50

Test Instruments : Agilent E4991A Impedance / Material Analyzer

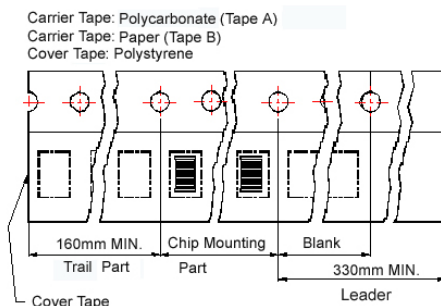


Packaging Specifications

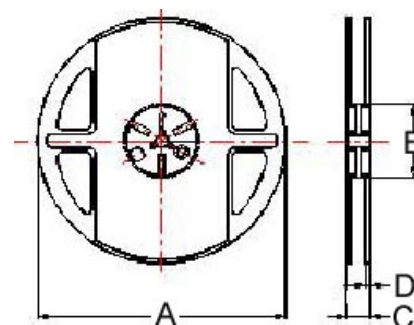
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions								Reel Dimensions				Quantity PCS / REEL
	A	B	T	W	P	F	K	Tape Type.	A	B	C	D	
100505	0.65	1.15	0.60	8.0	2.0	3.5	-	B	178	60	12	2	10000
160808	1.05	1.85	0.95	8.0	4.0	3.5	-	B	178	60	12	2	4000