

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



Recommended Pattern



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
③160805	1.6 \pm 0.15	0.80 \pm 0.15	0.5 \pm 0.15	0.3 \pm 0.2
④160808	1.6 \pm 0.15	0.80 \pm 0.15	0.8 \pm 0.15	0.3 \pm 0.2
⑤201209	2.0 \pm 0.20	1.25 \pm 0.20	0.9 \pm 0.20	0.5 \pm 0.3
⑥321611	3.2 \pm 0.20	1.60 \pm 0.20	1.1 \pm 0.20	0.5 \pm 0.3

- ① : SBY / SBJ / NB / PB ② : SBY / SBJ / NB / PB / UPB / HF
 ③ : UPB ④ : SBK / SBJ / GB / PB / NB / UPB / VPB
 ⑤ : SBK / GB / PB / UPB ⑥ : SBY / SBK / PB / UPB

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
③160805	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
④160808	0.7 ~ 0.8	1.8 ~ 2.0	0.6 ~ 0.8
⑤201209	1.0 ~ 1.2	2.6 ~ 4.0	1.0 ~ 1.2
⑥321611	2.0	4.2 ~ 5.2	1.2

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

Dimension Conversion

Code	Dimension in mm (AxBxC)	EIA
060303	0.6X0.3X0.3	0201
100505	1.0X0.5X0.5	0402
160805	1.6x0.8x0.5	0603
160808	1.6x0.8x0.8	0603
201209	2.0x1.2x0.9	0805
321611	3.2x1.6x1.1	1206

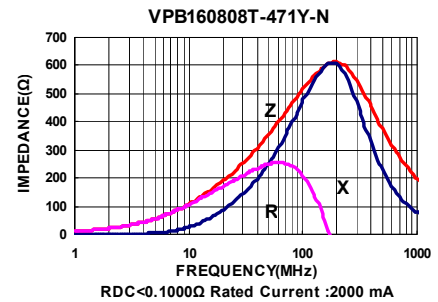
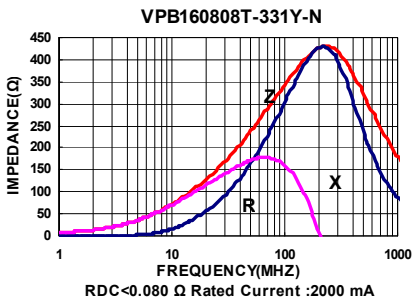
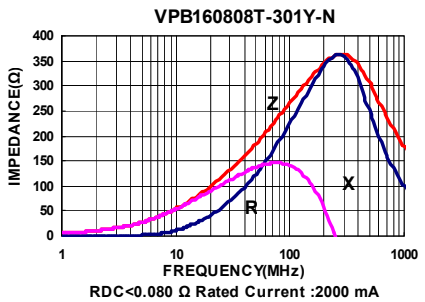
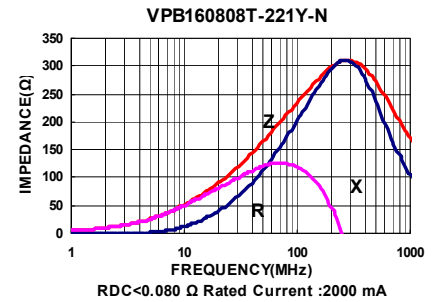
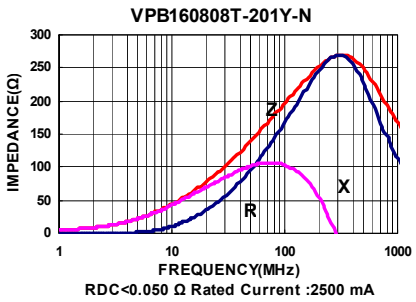
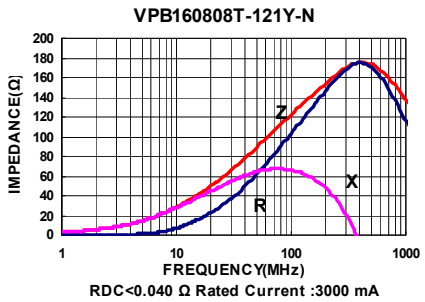
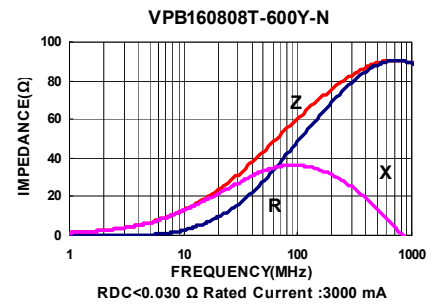
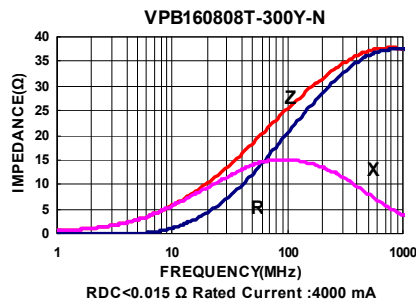
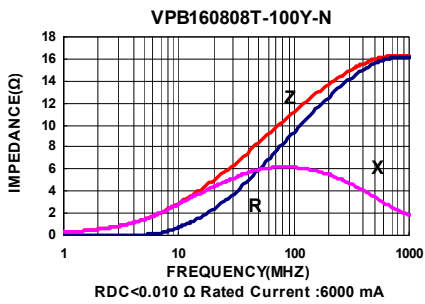
Electrical Characteristics

Part Number	Impedance ($\Omega \pm 25\%$)	Test Frequency (MHz)	RDC (Ω) Max	Rated current (mA) Max
VPB160808T-100Y-N	10	100	0.010	6000
VPB160808T-300Y-N	30	100	0.015	4000
VPB160808T-600Y-N	60	100	0.030	3000
VPB160808T-121Y-N	120	100	0.040	3000
VPB160808T-201Y-N	200	100	0.050	2500
VPB160808T-221Y-N	220	100	0.080	2000
VPB160808T-301Y-N	300	100	0.080	2000
VPB160808T-331Y-N	330	100	0.080	2000
VPB160808T-471Y-N	470	100	0.100	2000
VPB160808T-601Y-N	600	100	0.100	2000

Note: When ordering, please specify tolerance code. Tolerance : Y= $\pm 25\%$

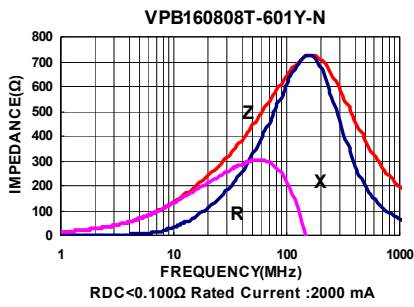
- Operating temperature range - 55°C ~ 125°C(Including self - temperature rise)
- Rate Current : Applied the current to coils, the temperature rise shall not be more than 30°C
- Measure Equipment :
Z : HP4291A
RDC : HP4338B or CHEN HWA 502

Test Instruments : Agilent E4991A Impedance / Material Analyzer



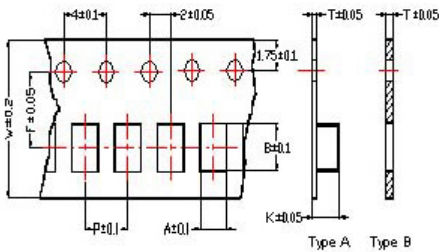
SMD Multilayer Ferrite Chip Power Beads – VPB Series

Test Instruments : Agilent E4991A Impedance / Material Analyzer

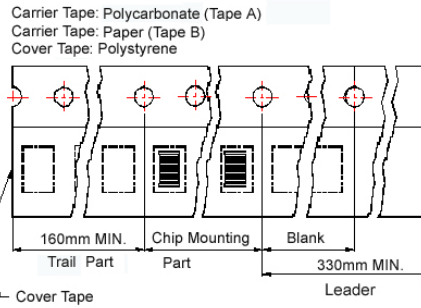


Packaging Specifications

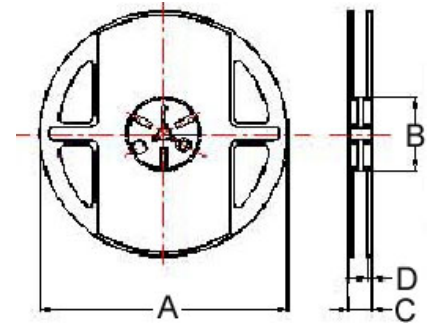
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
	A	B	T	W	P	F	Tape Type	A	B	C	D	
160808	1.05	1.85	0.95	8.0	4.0	3.5	B	178	60	12	2	4000