



## SMD Multilayer Ferrite Chip Beads-HPB Series

### FEATURES

- \* Product symbol: HSB, HGB, HPB, HUPB, HNB, HF, HVPB
- \* Packaging: T: Tape and Reel; B: Bulk
- \* Tolerance: Y =  $\pm 25\%$ ; M =  $\pm 20\%$ ; T:  $\pm 30\%$
- \* Note: RoHS Compliant

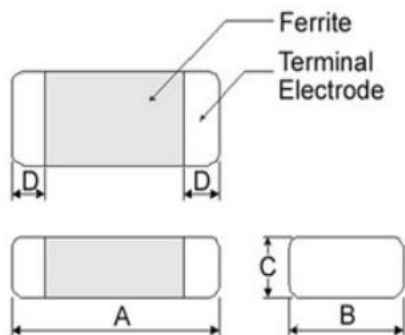


### ORDERING CODE(标志示例)

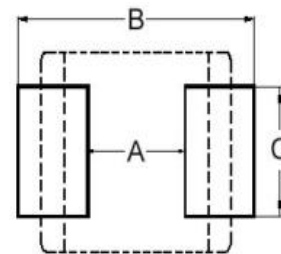
**HPB**    □□□□    -    □□□    □  
(1)            (2)                            (3)            (4)

- (1) HPB 向华料号 Part Number
- (2) 尺寸 Dimensions
- (3) 电感量 Inductance
- (4) 电感量公差 Inductance Tolerance

### 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

TYPE	A	B	C
①060303	0.2~0.3	0.75~1.05	0.30
②100505	0.40	1.2~1.4	0.50
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	2.00	4.2~5.2	1.20

### Dimension Conversion

Code	Dimension in mm (A×B×C)	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



## SMD Multilayer Ferrite Chip Beads-HPB060303 Series

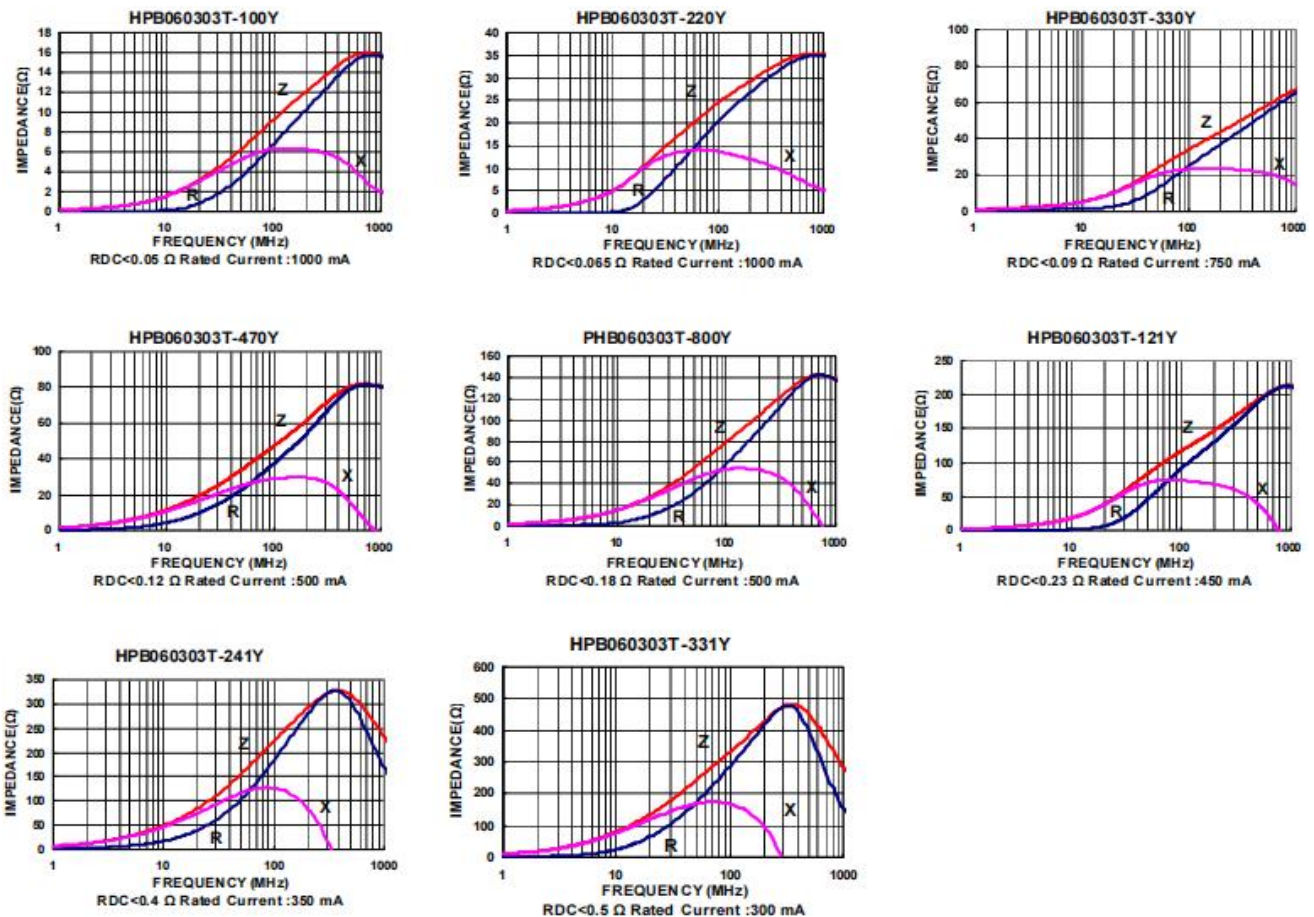
### HPB060303 series Electrical Characteristics

Part No.	Impedance ( $\Omega$ )	Tolerance ( $\pm\%$ )	Test Freq. (MHz)	RDC ( $\Omega$ )Max	Rated current (mA)Max
HPB060303T-100Y	10	25	100	0.050	1000
HPB060303T-220Y	22	25	100	0.065	1000
HPB060303T-330Y	33	25	100	0.090	750
HPB060303T-470Y	47	25	100	0.120	500
HPB060303T-800Y	80	25	100	0.180	500
HPB060303T-121Y	120	25	100	0.230	450
HPB060303T-241Y	240	25	100	0.400	350
HPB060303T-331Y	330	25	100	0.500	300

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

- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise)
- Rate Current: Applied the current to coils, the temperature rise shall not be more than  $30^{\circ}\text{C}$

### Test Instruments: Agilent E4991A Impedance / Material Analyzer



Please be sure to request approval specifications that provide further details of the products. Kindly note that the content of these specifications are subject to change or may be discontinued without advance notice. Please contact our sales department before ordering.



## SMD Multilayer Ferrite Chip Beads-HPB100505 Series

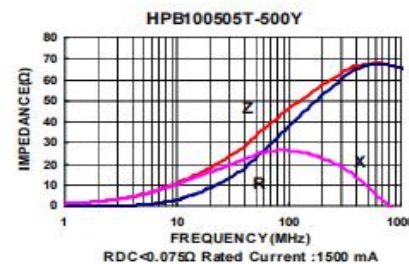
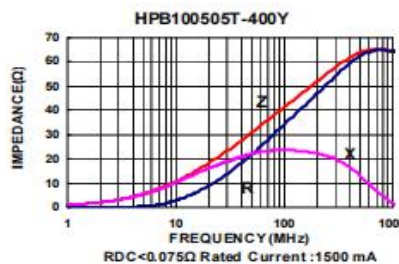
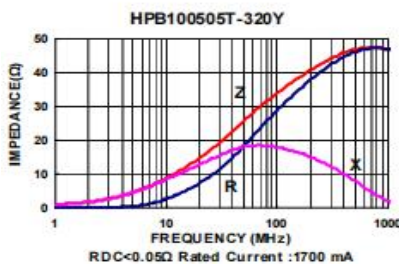
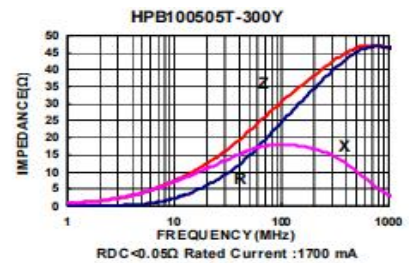
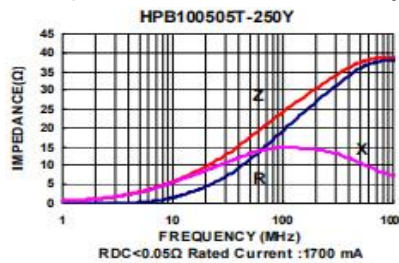
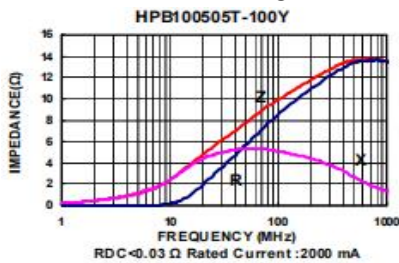
### HPB100505 series Electrical Characteristics

Part No.	Impedance (Ω)	Tolerance (±%)	Test Freq. (MHz)	RDC (Ω)Max	Rated current (mA)Max
HPB100505T-100Y	10	25	100	0.03	2000
HPB100505T-250Y	25	25	100	0.05	1700
HPB100505T-300Y	30	25	100	0.05	1700
HPB100505T-320Y	32	25	100	0.05	1700
HPB100505T-400Y	40	25	100	0.075	1500
HPB100505T-500Y	50	25	100	0.075	1500
HPB100505T-600Y	60	25	100	0.075	1500
HPB100505T-680Y	68	25	100	0.09	1200
HPB100505T-700Y	70	25	100	0.09	1200
HPB100505T-800Y	80	25	100	0.09	1200
HPB100505T-101Y	100	25	100	0.09	1200
HPB100505T-121Y	120	25	100	0.09	1400
HPB100505T-151Y	150	25	100	0.14	1400
HPB100505T-181Y	180	25	100	0.14	900
HPB100505T-221Y	220	25	100	0.18	1100
HPB100505T-601Y	600	25	100	0.34	700
HPB100505T-102Y	1000	25	100	0.49	500

**Note:** When ordering, please specify tolerance code. Tolerance : Y=±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

### Test Instruments: Agilent E4991A Impedance / Material Analyzer

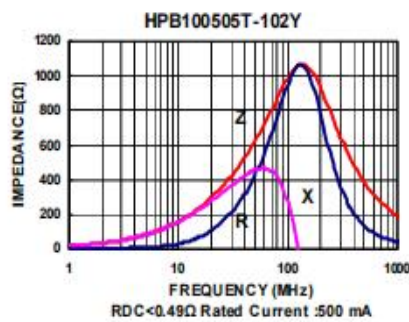
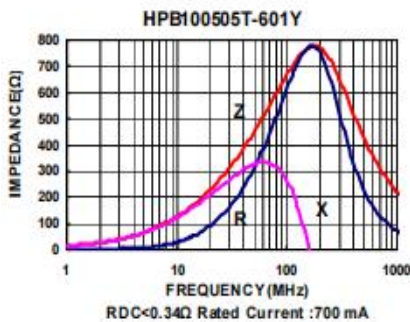
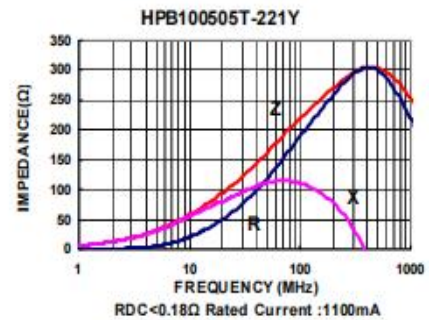
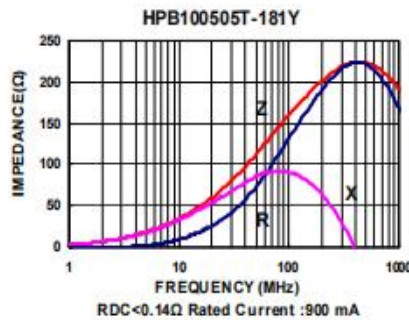
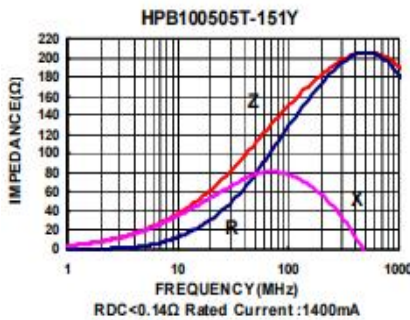
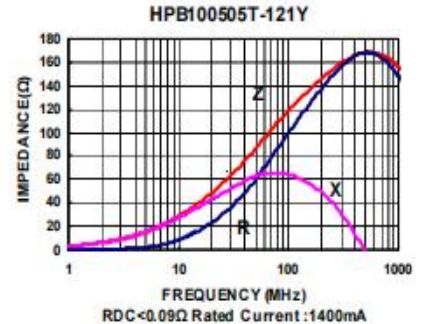
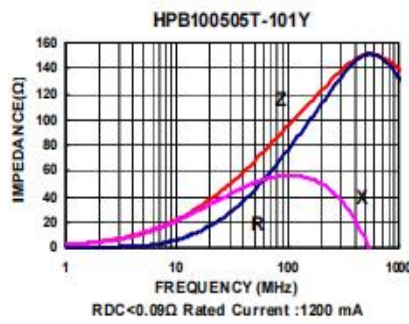
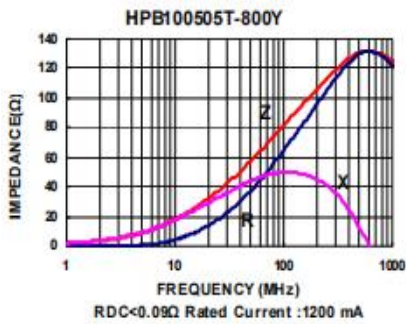
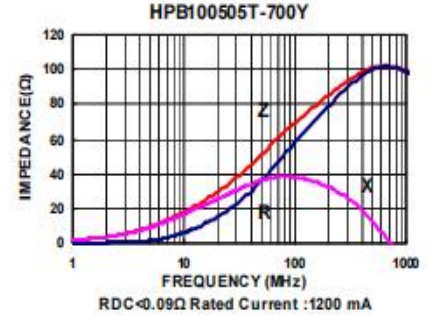
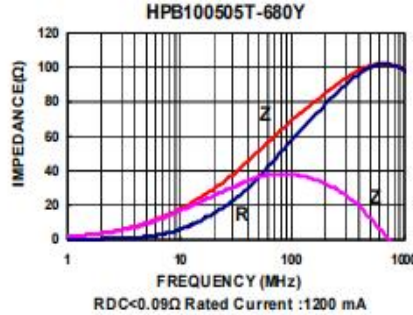
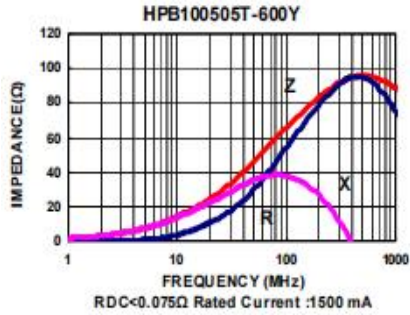


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## SMD Multilayer Ferrite Chip Beads-HPB100505 Series

Test Instruments: Agilent E4991A Impedance / Material Analyzer



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## SMD Multilayer Ferrite Chip Beads-HPB160808 Series

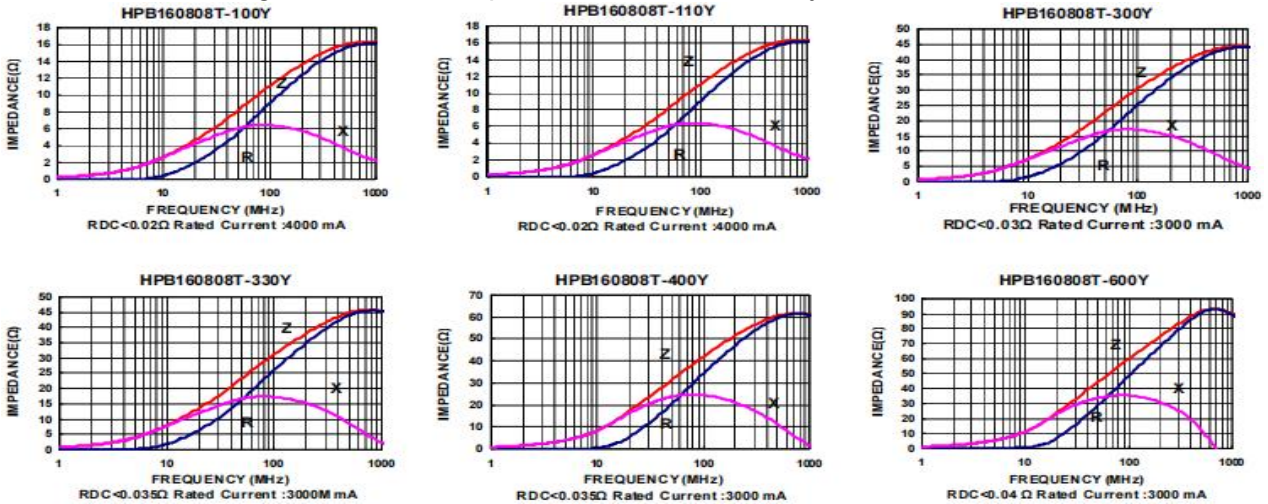
### HPB160808 series Electrical Characteristics

Part No.	Impedance	Tolerance	Test Freq. (MHz)	RDC	Rated current
	( $\Omega$ )	( $\pm\%$ )		( $\Omega$ )Max	(mA)Max
HPB160808T-100Y	10	25	100	0.020	4000
HPB160808T-110Y	11	25	100	0.020	4000
HPB160808T-300Y	30	25	100	0.030	3000
HPB160808T-330Y	33	25	100	0.035	3000
HPB160808T-400Y	40	25	100	0.035	3000
HPB160808T-600Y	60	25	100	0.040	3000
HPB160808T-800Y	80	25	100	0.050	2500
HPB160808T-101Y	100	25	100	0.050	2500
HPB160808T-121Y	120	25	100	0.080	2500
HPB160808T-151Y	150	25	100	0.085	2000
HPB160808T-181Y	180	25	100	0.090	2000
HPB160808T-221Y	220	25	100	0.100	2000
HPB160808T-301Y	300	25	100	0.120	1500
HPB160808T-331Y	330	25	100	0.120	1500
HPB160808T-471Y	470	25	100	0.150	1500
HPB160808T-601Y	600	25	100	0.200	1000
HPB160808T-102Y	1000	25	100	0.250	800
HPB160808T-122Y	1200	25	100	0.250	800
HPB160808T-152Y	1500	25	100	0.400	800

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

- Operating temperature range— $55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise)
- Rate Current: Applied the current to coils, the temperature rise shall not be more than  $30^{\circ}\text{C}$

### Test Instruments: Agilent E4991A Impedance / Material Analyzer

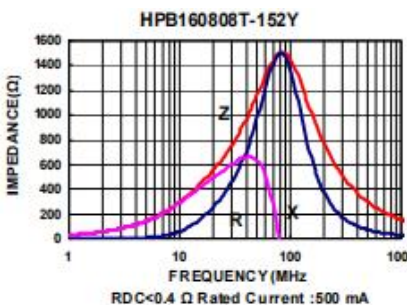
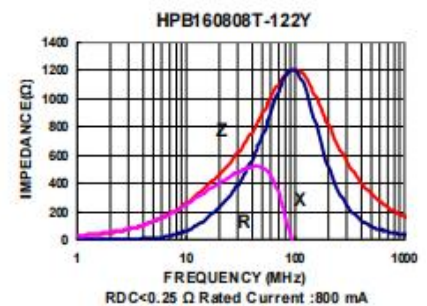
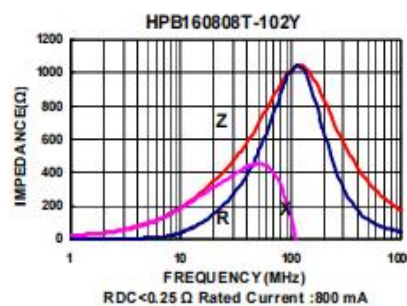
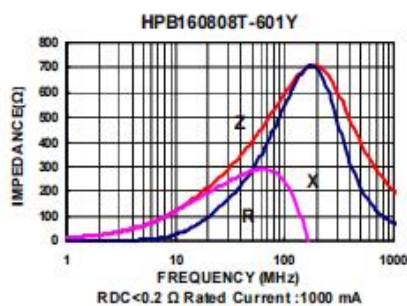
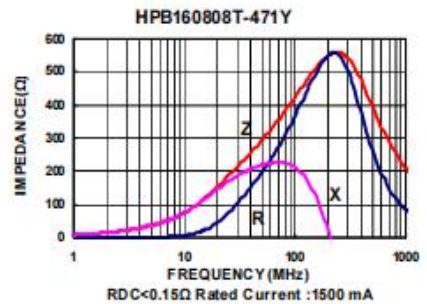
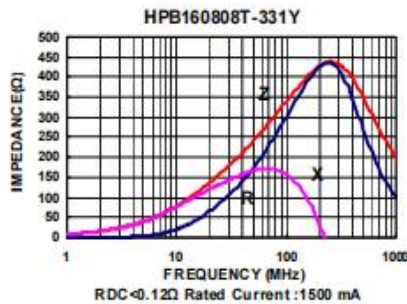
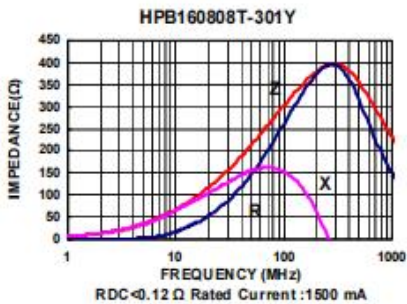
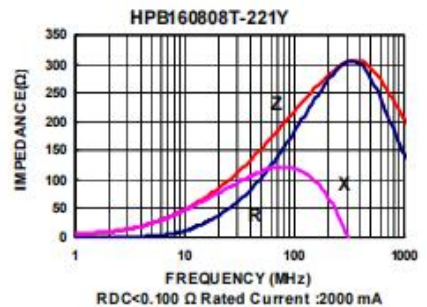
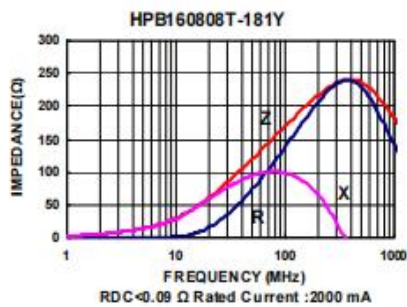
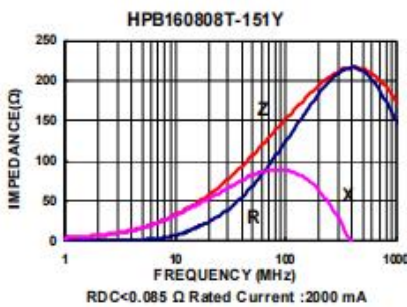
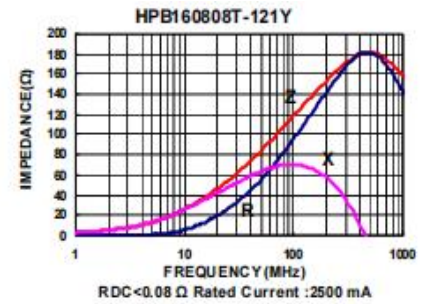
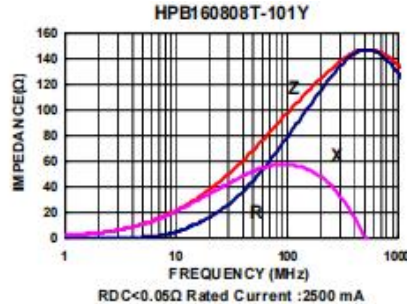
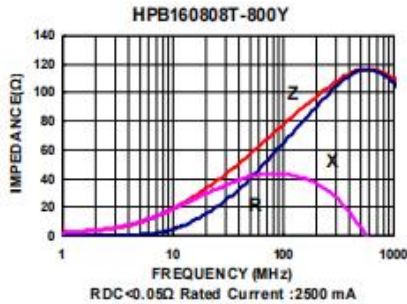


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## SMD Multilayer Ferrite Chip Beads-HPB160808 Series

Test Instruments: Agilent E4991A Impedance / Material Analyzer



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## SMD Multilayer Ferrite Chip Beads-HPB201209 Series

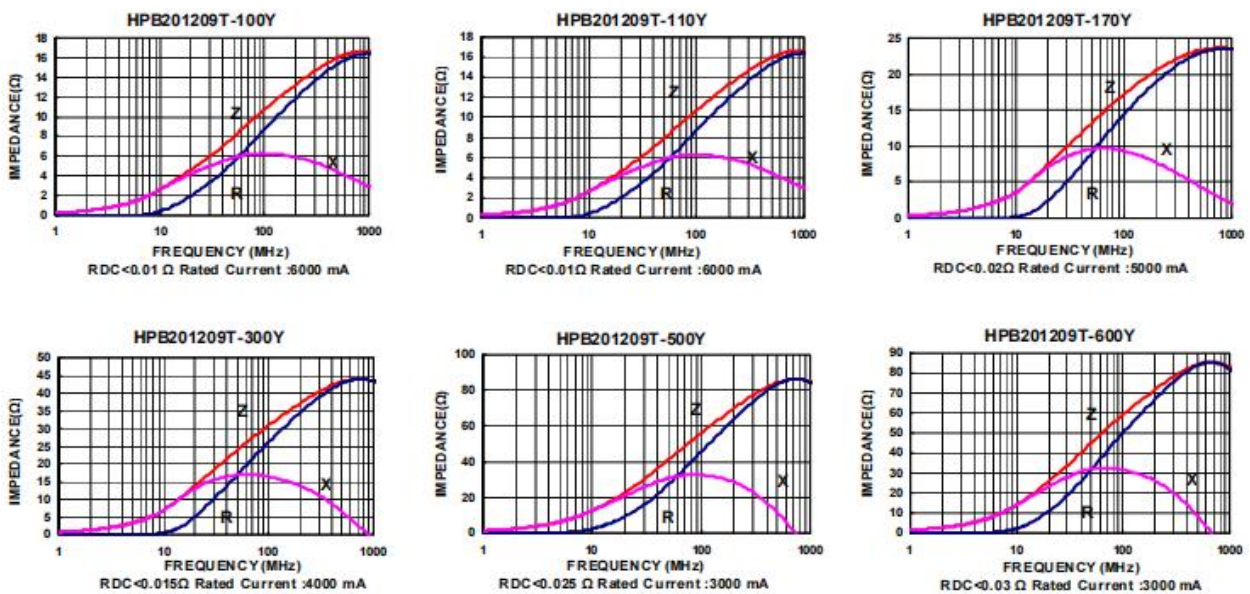
### HPB201209 series Electrical Characteristics

Part No.	Impedance ( $\Omega$ )	Tolerance ( $\pm\%$ )	Test Freq. (MHz)	RDC ( $\Omega$ )Max	Rated current (mA)Max
HPB201209T-100Y	10	25	100	0.010	6000
HPB201209T-110Y	11	25	100	0.010	6000
HPB201209T-170Y	17	25	100	0.020	5000
HPB201209T-300Y	30	25	100	0.015	4000
HPB201209T-500Y	50	25	100	0.025	3000
HPB201209T-600Y	60	25	100	0.030	3000
HPB201209T-800Y	80	25	100	0.040	3000
HPB201209T-101Y	100	25	100	0.040	3000
HPB201209T-121Y	120	25	100	0.040	3000
HPB201209T-221Y	220	25	100	0.080	2000
HPB201209T-301Y	300	25	100	0.080	2000
HPB201209T-331Y	330	25	100	0.080	2000
HPB201209T-471Y	470	25	100	0.100	2000
HPB201209T-601Y	600	25	100	0.100	2000
HPB201209T-102Y	1000	25	100	0.120	1500
HPB201209T-152Y	1500	25	100	0.300	1000

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

- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise)
- Rate Current: Applied the current to coils, the temperature rise shall not be more than  $30^{\circ}\text{C}$

### Test Instruments: Agilent E4991A Impedance / Material Analyzer

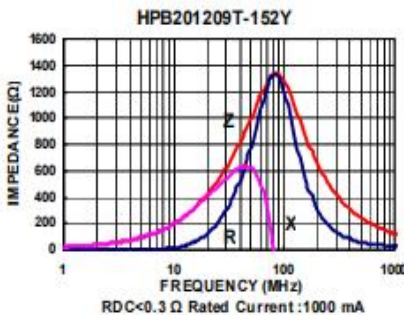
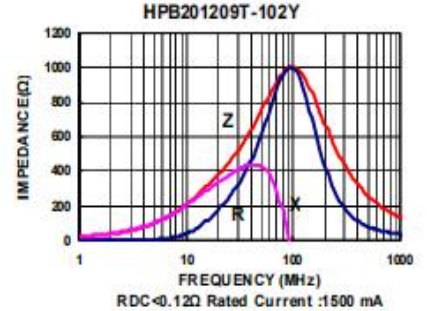
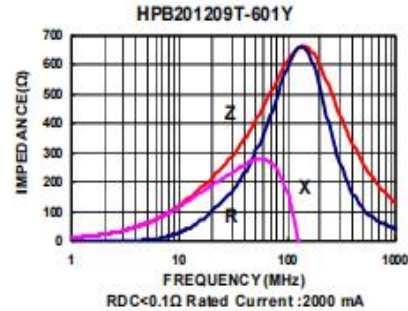
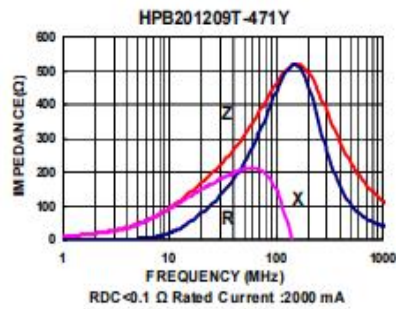
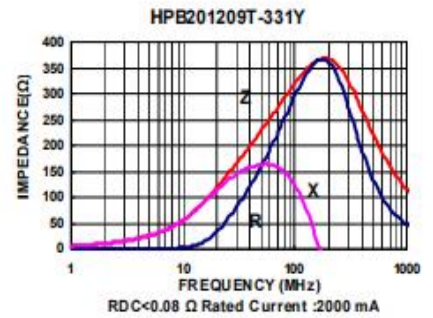
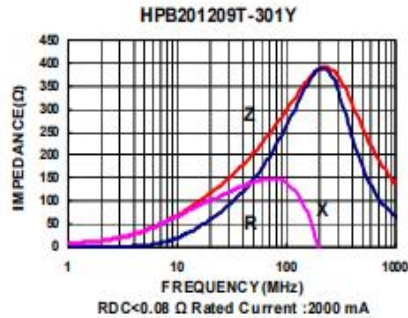
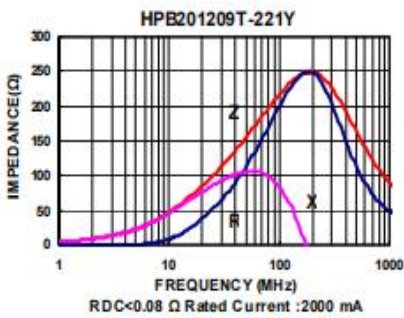
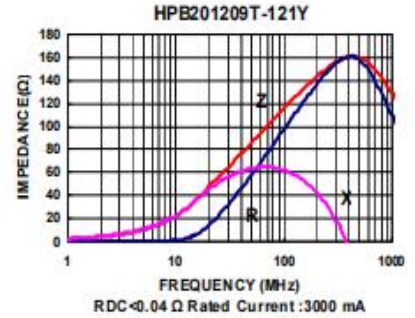
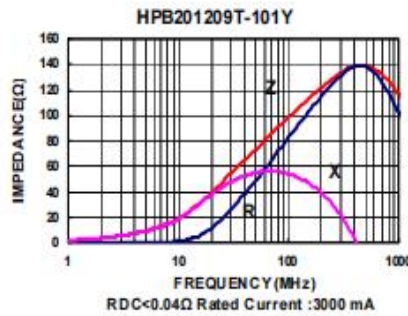
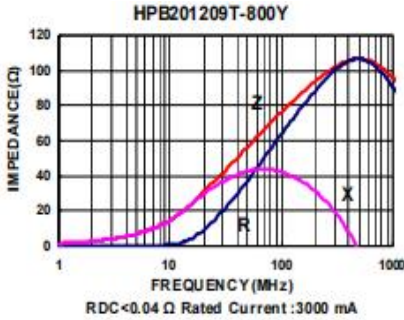


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## SMD Multilayer Ferrite Chip Beads-HPB201209 Series

Test Instruments: Agilent E4991A Impedance / Material Analyzer



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## SMD Multilayer Ferrite Chip Beads-HPB321611 Series

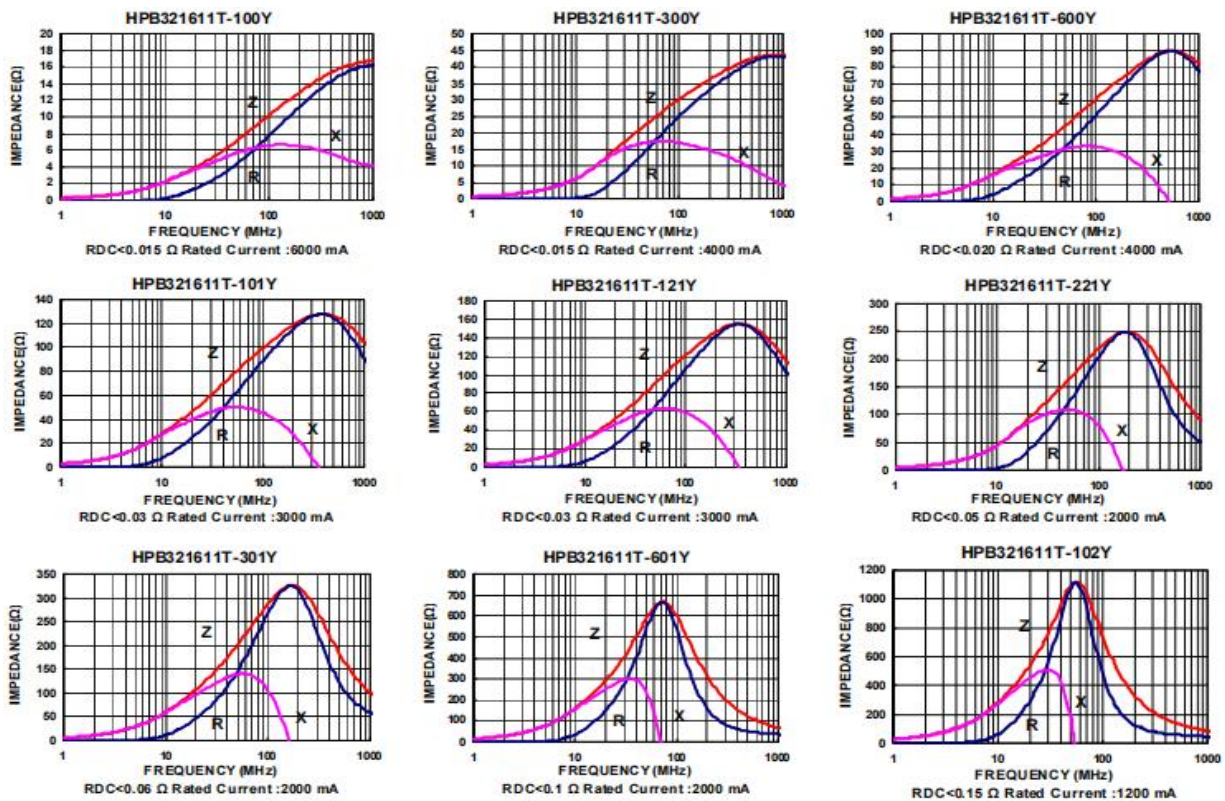
### HPB321611 series Electrical Characteristics

Part No.	Impedance ( $\Omega$ )	Tolerance ( $\pm\%$ )	Test Freq. (MHz)	RDC ( $\Omega$ )Max	Rated current (mA)Max
HPB321611T-100Y	10	25	100	0.015	6000
HPB321611T-300Y	30	25	100	0.015	4000
HPB321611T-600Y	60	25	100	0.020	4000
HPB321611T-101Y	100	25	100	0.030	3000
HPB321611T-121Y	120	25	100	0.030	3000
HPB321611T-221Y	220	25	100	0.050	2000
HPB321611T-301Y	300	25	100	0.060	2000
HPB321611T-601Y	600	25	100	0.100	2000
HPB321611T-102Y	1000	25	100	0.150	1200
HPB321611T-122Y	1200	25	100	0.180	1000
HPB321611T-152Y	1500	25	100	0.200	800

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

- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise)
- Rate Current: Applied the current to coils, the temperature rise shall not be more than  $30^{\circ}\text{C}$

### Test Instruments: Agilent E4991A Impedance / Material Analyzer



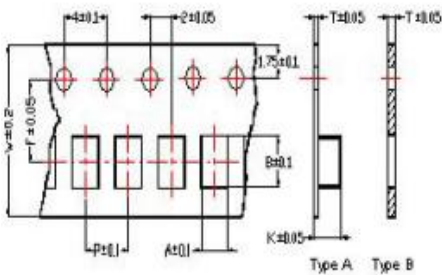
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## SMD Multilayer Ferrite Chip Beads-HPB Series

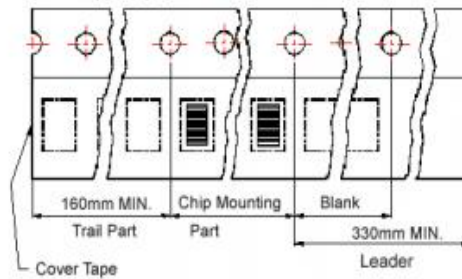
### Packaging Specifications

#### Tape Dimensions

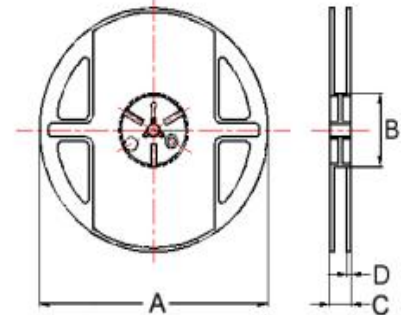


#### Tape Material

Carrier Tape: Polycarbonate (Tape A)  
Carrier Tape: Paper (Tape B)  
Cover Tape: Polystyrene



#### Reel Dimensions



- ① : HSBY / HSBJ / HNB / HPB
- ② : HSBY / HSBJ / HNB / HPB / HUPB / HF
- ③ : HUPB
- ④ : HSBK / HSBJ / HGB / HPB / HNB / HUPB / HVPB
- ⑤ : HSBK / HGB / HPB / HUPB
- ⑥ : HSBY / HSBK / HPB / HUPB

### Dimensions in mm

TYPE	Tape Dimensions								Reel Dimensions				Quantity PCS/REEL
	A	B	T	W	P	F	K	Tape	A	B	C	D	
①060303	0.37	0.67	0.42	8.0	2.0	3.5	--	B	178	60	10	2	15000
②100505	0.62	1.12	0.60	8.0	2.0	3.5	--	B	178	60	12	2	10000
③160805	1.05	1.85	0.60	8.0	2.0	3.5	--	B	178	60	12	2	10000
④160808	1.05	1.85	0.95	8.0	4.0	3.5	--	B	178	60	12	2	4000
⑤201209	1.50	2.30	0.97	8.0	4.0	3.5	--	B	178	60	12	2	4000
⑥321611	1.88	3.50	0.22	8.0	4.0	3.5	1.27	A	178	60	12	2	3000