CHIP FERRITE BEADS

Features

1. Effective for suppressing noise at high frequency, from several MHz to several hundreds MHz.
2. Chip type is suited for preventing the abnormal oscillation in high frequency amplifying circuits.
3. Terminal electrode has excellent solder heat resistance.
4. Frequency characteristics of the high impedance products for high performance electronic systems.
5. High reliability in the circuits of high-current, because internal electrode has low resistivity.

Applications

1. Noise suppression in digital equipment.
2. Computers and its peripheral devices, VCR and camera.
3. Noise suppression in automotive electronic equipment, car stereo, car engine controller.
4. Noise suppression for OA electronic instruments.

Ordering Information

H B - 1 M 1608 - 121 J T
(1) (2) (3) (4) (5) (6)

(1) Series
HB : For signal line
HH : For high current(~3.0A)
HU : For ultra high current(~6.0A)

(3) Dimensions
The first two digits: length(mm)
The last two digits: width (mm)

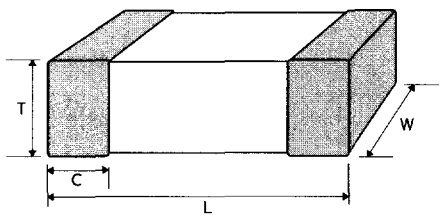
(5) Termination
J :Nickel barrier

(2) Material & Design
L ,Y : For ultra high speed
S ,B : For high speed
H ,C : For general purpose
M,P : For high impedance type
T ,V : For low speed

(4) Impedance (at 100㎒)
The first two digits are significant.
The last digit is the number of zeros following.

(6) Packing
B: Bulk Pack
T: Tape & Reel(ø 178mm [7 inches])
L: Tape & Reel(ø 254mm [10 inches])

Shape and Dimensions



unit:mm[inches]

Type	L	W	T	C(max.)
H□-1□1005-	1.0±0.05 [.039±.002]	0.5±0.05 [.020±.002]	0.5±0.05 [.020±.002]	0.3 [.012]
H□-1□1608-	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.5 [.020]
H□-1□2012-	2.0±0.20 [.079±.008]	1.25±0.20 [.049±.008]	1.0±0.20 [.039±.008]	0.6 [.024]
	2.0±0.20 [.079±.008]	1.25±0.20 [.049±.008]	*1.25±0.20 [.049±.008]	0.6 [.024]
H□-1□3216-	3.2±0.20 [.126±.008]	1.6±0.20 [.063±.008]	1.3±0.20 [.051±.008]	0.7 [.028]
H□-1□4516-	4.5±0.25 [.177±.010]	1.6±0.20 [.063±.008]	1.3±0.20 [.051±.008]	0.8 [.031]
H□-1□4532-	4.5±0.25 [.177±.010]	3.2±0.25 [.126±.010]	1.3±0.25 [.051±.010]	1.0 [.039]
H□-1□5750-	5.7±0.30 [.225±.012]	5.0±0.30 [.198±.012]	1.6±0.25 [.063±.010]	1.2 [.047]

*Only HU Series

Specifications

HB series (For signal line)

HB1005

Part No.	|Z| at 100MHz(Ω)		DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	min.		
HB-1H1005-100□□	10	7.5	0.10	200
HB-1M1005-400□□	40	30	0.15	200
HB-1M1005-600□□	60	45	0.30	200
HB-1M1005-800□□	80	60	0.30	200
HB-1M1005-121□□	120	90	0.40	150
HB-1M1005-221□□	220	165	0.60	100
HB-1M1005-301□□	300	225	0.80	50
HB-1M1005-601□□	600	450	1.00	50
HB-1T1005-100□□	10	7.5	0.10	200
HB-1T1005-400□□	40	30	0.15	200
HB-1T1005-600□□	60	45	0.30	200
HB-1T1005-800□□	80	60	0.30	200
HB-1T1005-121□□	120	90	0.40	150
HB-1T1005-221□□	220	165	0.60	100
HB-1T1005-301□□	300	225	0.80	50
HB-1T1005-601□□	600	450	1.00	50
HB-1S1005-100□□	10	7.5	0.20	200
HB-1S1005-300□□	30	23	0.30	200
HB-1S1005-600□□	60	45	0.40	150
HB-1S1005-101□□	100	75	0.50	150

HB1608

Part No.	|Z| at 100MHz(Ω)		DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	min.		
HB-1H1608-300□□	30	22	0.08	500
HB-1M1608-600□□	60	45	0.09	200
HB-1M1608-800□□	80	60	0.10	200
HB-1M1608-121□□	120	90	0.12	200
HB-1M1608-221□□	220	165	0.20	200
HB-1M1608-301□□	300	225	0.30	200
HB-1M1608-501□□	500	375	0.40	200
HB-1M1608-601□□	600	450	0.40	200
HB-1M1608-801□□	800	600	0.60	200
HB-1M1608-102□□	1000	750	0.60	150
HB-1S1608-200□□	20	15	0.12	300
HB-1S1608-300□□	30	22	0.12	300
HB-1S1608-400□□	40	30	0.12	300
HB-1S1608-550□□	55	42	0.15	200
HB-1S1608-800□□	80	60	0.25	200
HB-1S1608-121□□	120	90	0.25	200
HB-1S1608-221□□	220	165	0.40	200
HB-1T1608-260□□	26	20	0.05	500
HB-1T1608-800□□	80	60	0.10	300
HB-1T1608-121□□	120	90	0.20	250
HB-1T1608-221□□	220	165	0.30	200
HB-1T1608-301□□	300	225	0.35	200
HB-1T1608-601□□	600	450	0.50	200
HB-1T1608-102□□	1000(at 60MHz)	750	0.70	200
HB-1B1608-222□□	2200	1650	0.85	50
HB-1P1608-121□□	120	90	0.25	250
HB-1P1608-201□□	200	150	0.30	200
HB-1P1608-301□□	300	225	0.35	200
HB-1P1608-601□□	600	450	0.50	150

HB1608

Part No.	|Z| at 100㎒(Ω)		DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	min.		
HB-1V1608-121□□	120	90	0.25	250
HB-1V1608-201□□	200	150	0.30	200
HB-1V1608-301□□	300	225	0.35	200
HB-1V1608-601□□	600	450	0.50	150

HB2012

Part No.	|Z| at 100㎒(Ω)		DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	min.		
HB-1H2012-260□□	26	20	0.02	600
HB-1H2012-320□□	32	24	0.03	600
HB-1M2012-800□□	80	60	0.08	300
HB-1M2012-121□□	120	90	0.10	300
HB-1M2012-151□□	150	115	0.12	300
HB-1M2012-221□□	220	165	0.12	300
HB-1M2012-301□□	300	225	0.15	300
HB-1M2012-601□□	600	450	0.25	300
HB-1M2012-102□□	1000	750	0.30	300
HB-1M2012-202□□	2000(at 70㎒)	1500	0.50	300
HB-1M2012-252□□	2500(at 50㎒)	1875	0.60	300
HB-1S2012-5R0□□	5	3.5	0.05	300
HB-1S2012-8R0□□	8	6	0.05	300
HB-1S2012-400□□	40	30	0.15	250
HB-1S2012-800□□	80	60	0.18	200
HB-1S2012-121□□	120	90	0.20	300
HB-1S2012-221□□	220	165	0.30	300
HB-1S2012-251□□	250	190	0.50	300
HB-1T2012-260□□	26	20	0.04	600
HB-1T2012-400□□	40	30	0.05	600
HB-1T2012-800□□	80	60	0.08	300
HB-1T2012-121□□	120	90	0.08	300
HB-1T2012-221□□	220	170	0.12	200
HB-1T2012-301□□	300	225	0.15	200
HB-1T2012-601□□	600	450	0.25	200
HB-1T2012-102□□	1000 (at 60㎒)	750	0.30	200
HB-1T2012-202□□	2000 (at 40㎒)	1500	0.50	200
HB-1T2012-252□□	2500 (at 35㎒)	1875	0.60	200
HB-1B2012-222□□	2200	1650	0.60	300
HB-1B2012-272□□	2700	2025	0.70	300
HB-1V2012-121□□	120	90	0.08	300
HB-1V2012-221□□	220	170	0.12	200
HB-1V2012-301□□	300	225	0.15	200
HB-1V2012-601□□	600	450	0.25	200
HB-1V2012-102□□	1000 (at 60㎒)	750	0.30	200
HB-1P2012-121□□	120	90	0.08	300
HB-1P2012-221□□	220	170	0.12	200
HB-1P2012-301□□	300	225	0.15	200
HB-1P2012-601□□	600	450	0.25	200
HB-1P2012-102□□	1000 (at 60㎒)	750	0.30	200

HB3216

Part No.	|Z| at 100㎒(Ω)		DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	min.		
HB-1C3216-350□□	35	26	0.02	600
HB-1H3216-500□□	50	37	0.03	600
HB-1H3216-700□□	70	52	0.05	600

HB3216

Part No.	|Z| at 100MHz(Ω)		DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	min.		
HB-1M3216-121□□	120	90	0.05	300
HB-1M3216-151□□	150	115	0.05	300
HB-1M3216-201□□	200	150	0.08	300
HB-1M3216-301□□	300	225	0.09	200
HB-1M3216-601□□	600	450	0.20	200
HB-1M3216-102□□	1000	750	0.25	200
HB-1S3216-100□□	10	7.5	0.05	300
HB-1S3216-200□□	20	15	0.10	300
HB-1S3216-800□□	80	60	0.25	200
HB-1S3216-251□□	250	190	0.30	200
HB-1S3216-601□□	600	450	0.40	200
HB-1T3216-350□□	35	26	0.03	600
HB-1T3216-500□□	50	37	0.03	600
HB-1T3216-700□□	70	52	0.05	400
HB-1T3216-121□□	120	90	0.10	300
HB-1T3216-151□□	150	115	0.10	300
HB-1T3216-201□□	200	150	0.15	300
HB-1T3216-601□□	600	450	0.30	200
HB-1T3216-801□□	800	600	0.30	200
HB-1T3216-102□□	1000 (at 60MHz)	750	0.40	200
HB-1T3216-122□□	1200 (at 50MHz)	900	0.40	200

HB4516

Part No.	|Z| at 100MHz(Ω)		DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	min.		
HB-1H4516-600□□	60	45	0.02	600
HB-1H4516-700□□	70	52	0.03	600
HB-1M4516-151□□	150	115	0.05	300
HB-1T4516-700□□	70	52	0.05	600

HB4532

Part No.	|Z| at 100MHz(Ω)		DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	min.		
HB-1H4535-121□□	120	90	0.04	600
HB-1H4532-151□□	150	115	0.04	600
HB-1T4532-121□□	120	90	0.04	600

HB series - L Type (For ultra high frequency signal line)

Part No.	|Z| at 100MHz(Ω)	|Z| at 1GHz(Ω)	DC Resistance (Ω) max.	Rated Current (mA) max.
	typ.	typ.		
HB-1L1608-2R0□□	2.0	20	0.20	300
HB-1L1608-4R0□□	4.0	40	0.25	300
HB-1L1608-5R5□□	5.5	55	0.30	300
HB-1L1608-7R0□□	7.0	80	0.30	300
HB-1L1608-9R0□□	9.0	40 (at 500MHz)	0.40	300
HB-1L1608-110□□	11.0	55 (at 500MHz)	0.40	300
HB-1L1608-130□□	13.0	70 (at 500MHz)	0.50	300
HB-1L1608-150□□	15.0	80 (at 500MHz)	0.50	300
HB-1L2012-3R5□□	3.5	30	0.15	500
HB-1L2012-6R5□□	6.5	30 (at 500MHz)	0.20	500
HB-1L2012-100□□	10.0	50 (at 500MHz)	0.25	500

HB series - Y Type (For ultra high frequency signal line)

Part No.	|Z| at 100㎒(Ω) typ.	|Z| at 1㎓(Ω) typ.	DC Resistance (Ω) max.	Rated Current (mA) max.
HB-1Y1608-4R0□□	4.0	40	0.20	300
HB-1Y1608-8R0□□	8.0	80	0.25	300
HB-1Y1608-100□□	10.0	100	0.30	300
HB-1Y1608-150□□	15.0	150	0.35	300
HB-1Y1608-200□□	20.0	120 (at 500㎒)	0.40	300

HH series (For high current ~3A)

Part No.	|Z| at 100㎒(Ω) typ.	|Z| at 100㎒(Ω) min.	DC Resistance (Ω) max.	Rated Current (mA) max.
HH-1M1608-300□□	30	22	0.05	1000
HH-1M1608-600□□	60	45	0.10	500
HH-1M1608-600□□A	60	45	0.08	1000
HH-1M1608-121□□	120	90	0.15	500
HH-1M1608-121□□A	120	90	0.05	1000
HH-1M2012-260□□	26	20	0.02	2000
HH-1M2012-600□□	60	45	0.02	3000
HH-1M2012-900□□	90	68	0.03	3000
HH-1M2012-121□□	120	90	0.05	2500
HH-1M2012-221□□	220	165	0.05	2000
HH-1M2012-301□□	300	225	0.07	2000
HH-1M2012-601□□	600	450	0.10	1000
HH-1T2012-260□□	26	20	0.02	3000
HH-1T2012-121□□	120	90	0.03	2500
HH-1T2012-251□□	250	190	0.05	3000
HH-1S2012-8R0□□	8	6	0.03	1500
HH-1T3216-260□□	26	20	0.03	3000
HH-1T3216-350□□	35	26	0.03	2500
HH-1H3216-500□□	50	37	0.02	3000
HH-1M3216-121□□	120	90	0.03	3000
HH-1M3216-501□□	500	375	0.06	2500
HH-1M3216-601□□	600	450	0.06	2500
HH-1H4516-600□□	60	45	0.02	3000
HH-1H4516-111□□	110	83	0.02	3000
HH-1H4532-121□□	120	90	0.03	3000
HH-1T4532-121□□	120	90	0.03	3000
HH-1M4532-601□□	600 (at 50㎒)	450	0.04	3000
HH-1M4532-132□□	1300 (at 60㎒)	980	0.05	3000
HH-1B4532-132□□	1300	980	0.05	3000
HH-1M5750-401□□	400	300	0.04	2000

HU series (For ultra high current ~6A)

Part No.	|Z| at 100㎒(Ω) typ.	|Z| at 100㎒(Ω) min.	DC Resistance (Ω) max.	Rated Current (mA) max.
HU-1M2012-400□□	40	30	0.02	5000
HU-1M2012-600□□	60	45	0.02	5000
HU-1M2012-800□□	80	60	0.02	5000
HU-1M2012-121□□	120	90	0.02	5000
HU-1T2012-500□□	50	37	0.015	4000
HU-1H3216-500□□	50	37	0.01	6000
HU-1H4516-600□□	60	45	0.01	6000
HU-1H4532-121□□	120	90	0.02	6000
HU-1M5750-401□□	400	300	0.02	6000

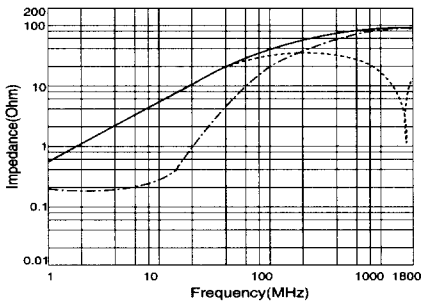
※Parts with other electrical characteristics can be provided upon customer's request.
※Test equipment: HP4291A + HP16192A

Electrical Characteristics

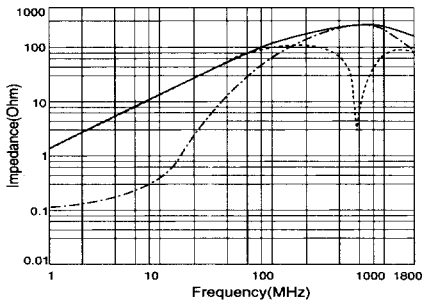
• HB1005, HB1608, HB2012

— Z - - - R --- X

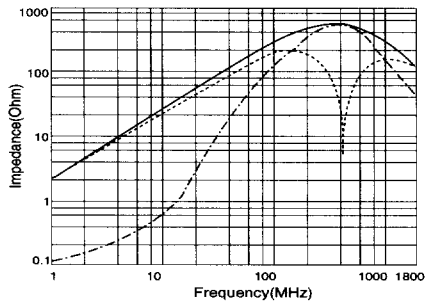
HB-1M1005-400J



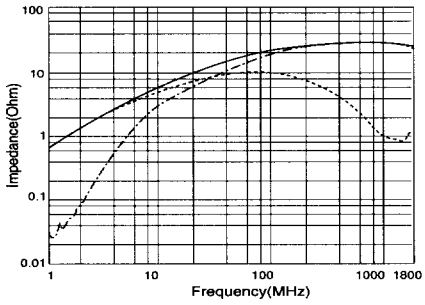
HB-1M1005-121J



HB-1M1005-301J



HB-1T1005-400J



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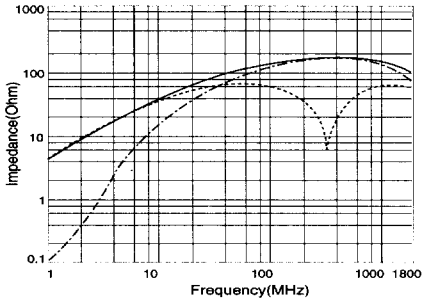
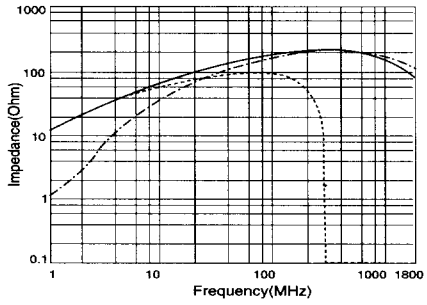
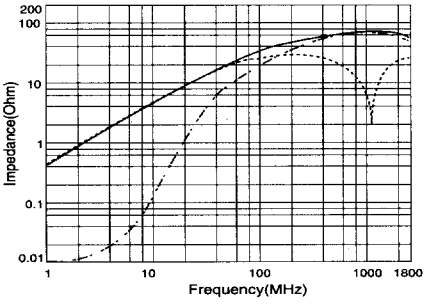


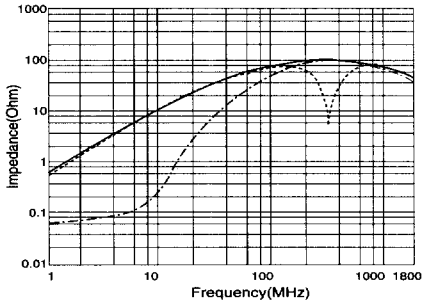
HB-1T1005-301J



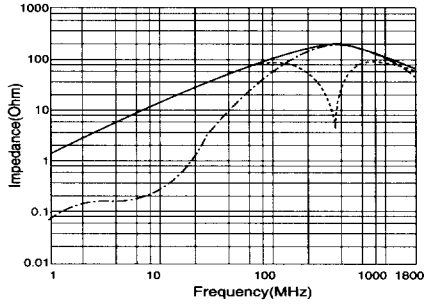
HB-1H1608-300J



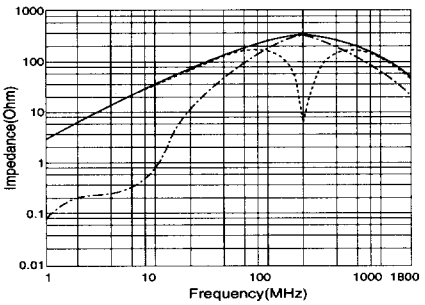
HB-1M1608-800J



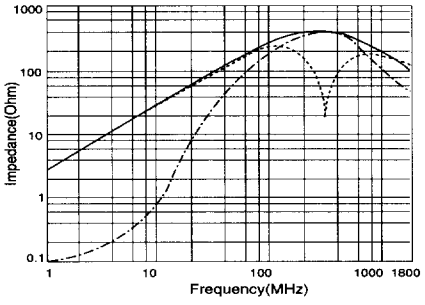
HB-1M1608-121J



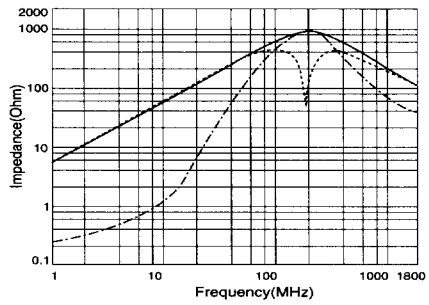
HB-1M1608-221J



HB-1M1608-301J

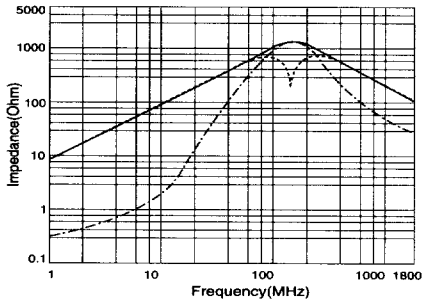


HB-1M1608-601J

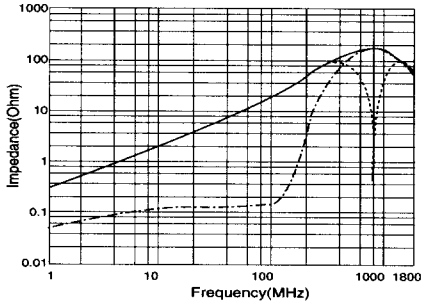


— Z - - - R --- X

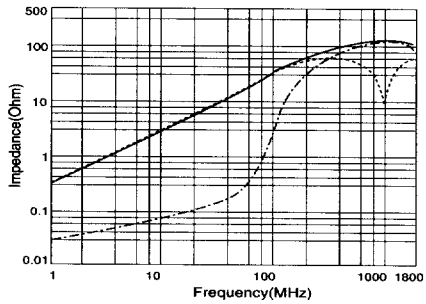
HB-1M1608-102J



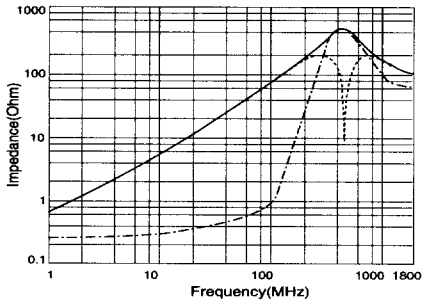
HB-1S1608-200J



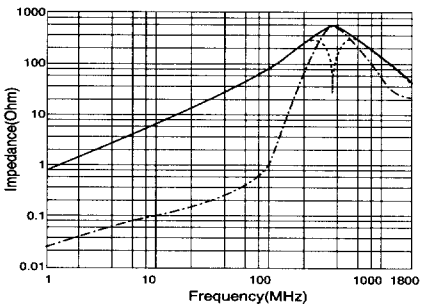
HB-1S1608-300J



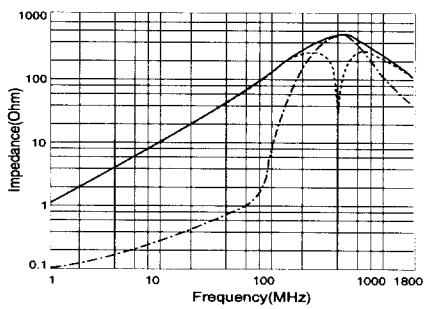
HB-1S1608-550J



HB-1S1608-800J



HB-1S1608-121J



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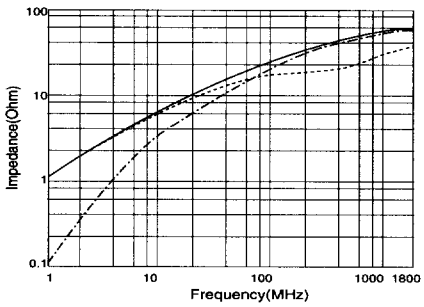

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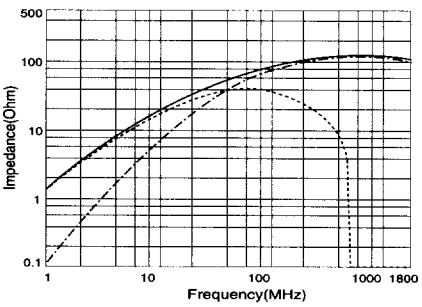
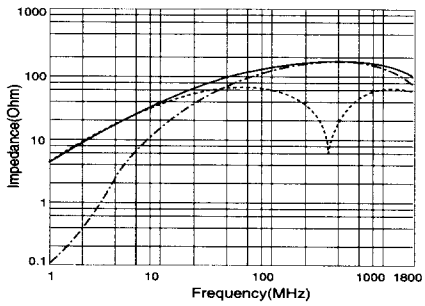
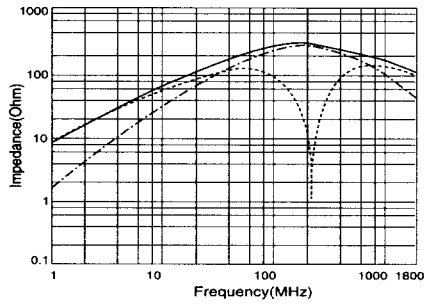


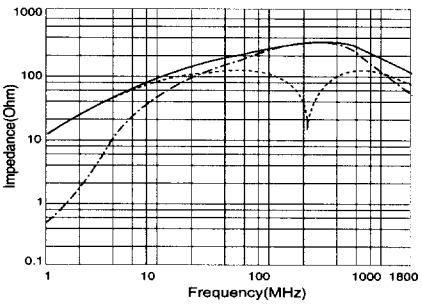
HB-1T1608-121J



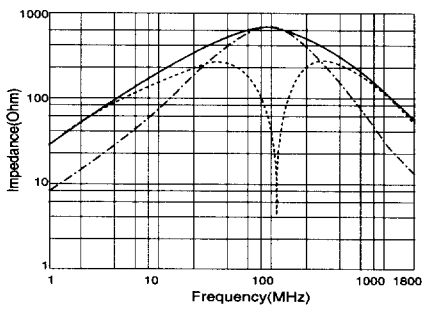
HB-1T1608-221J



HB-1T1608-301J



HB-1T1608-601J



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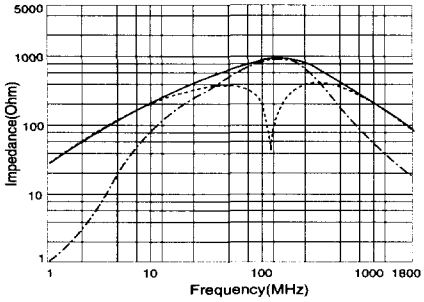
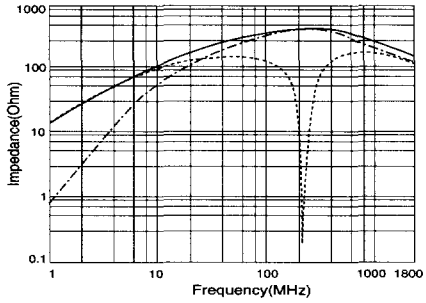
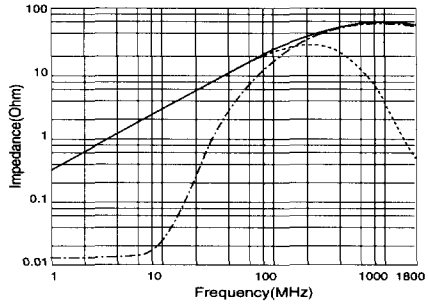
HB-1T1608-102J



HB-1V1608-301J



HB-1H2012-260J



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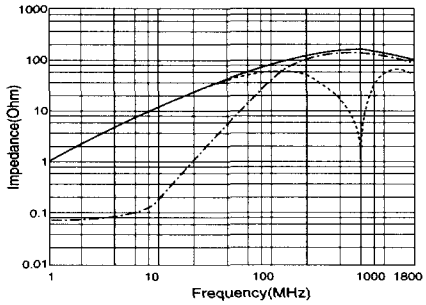
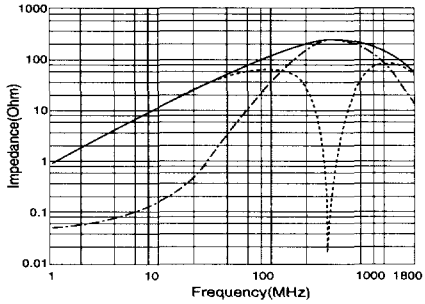


HB-1M2012-121J



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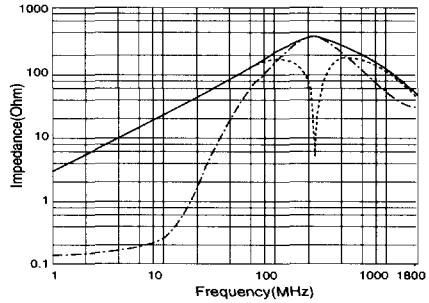

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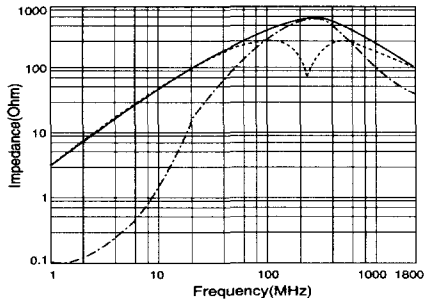

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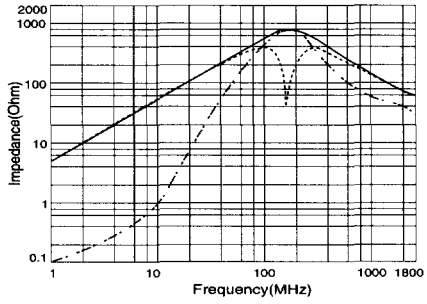

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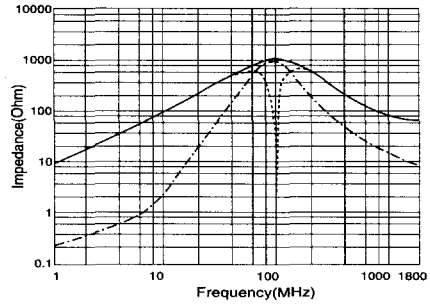
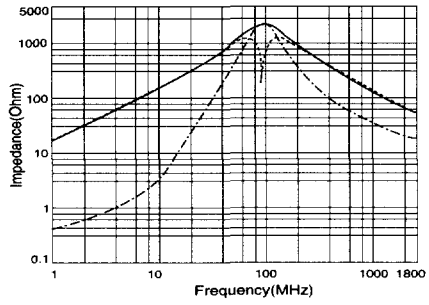
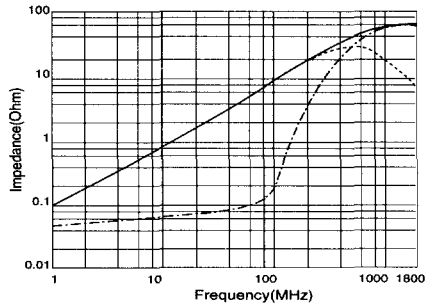


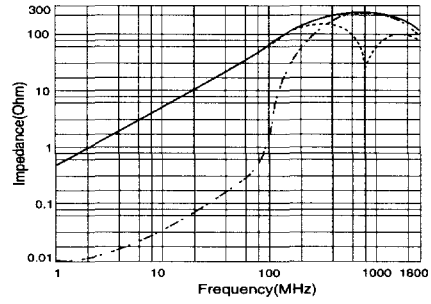
HB-1M2012-202J



HB-1S2012-8R0J



HB-1S2012-400J



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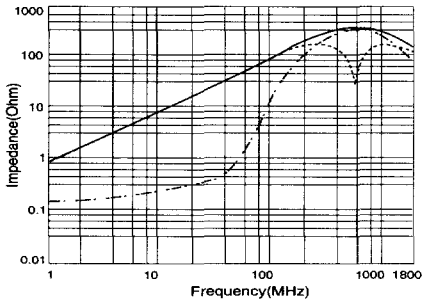
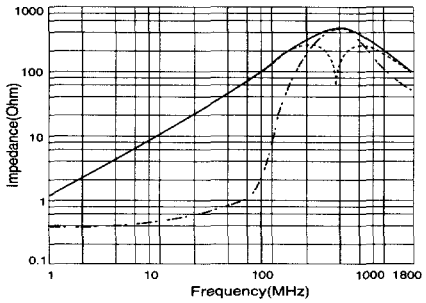
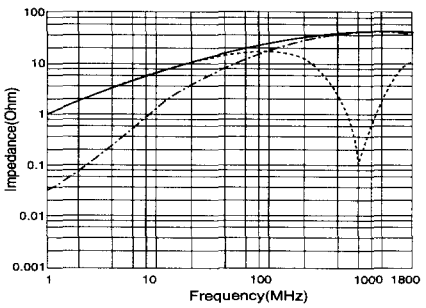
HB-1S2012-800J



HB-1S2012-121J



HB-1T2012-260J



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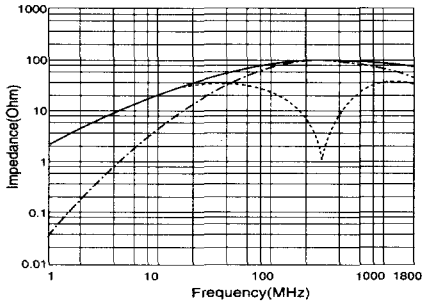

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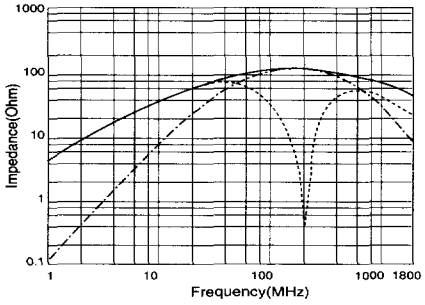
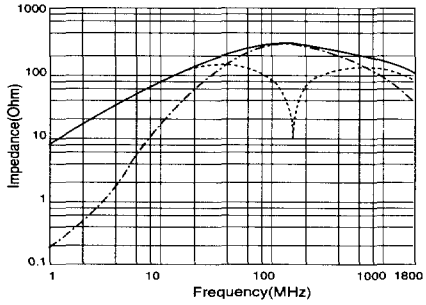
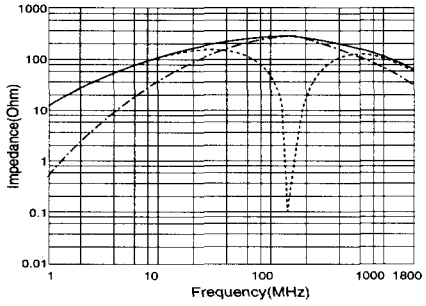


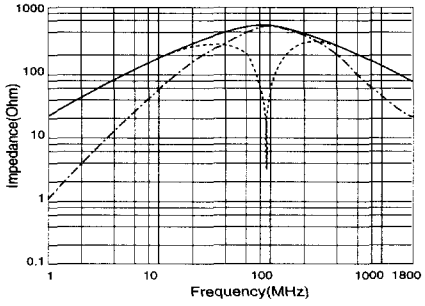
HB-1T2012-221J



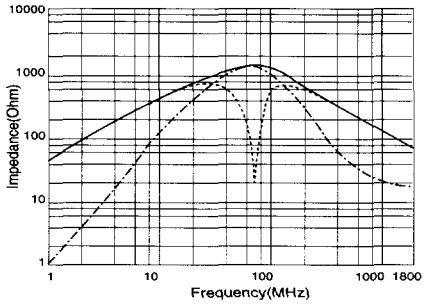
HB-1T2012-301J



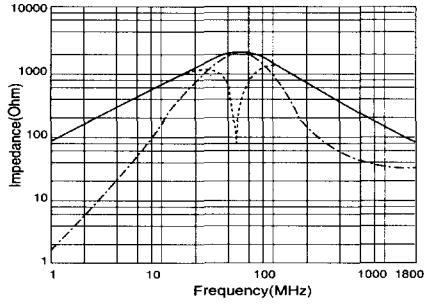
HB-1T2012-601J



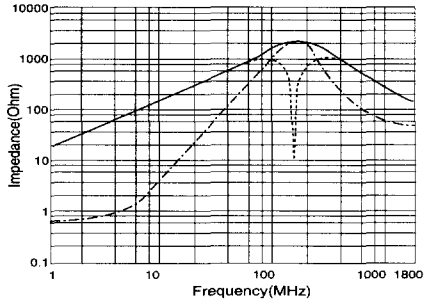
HB-1T2012-102J



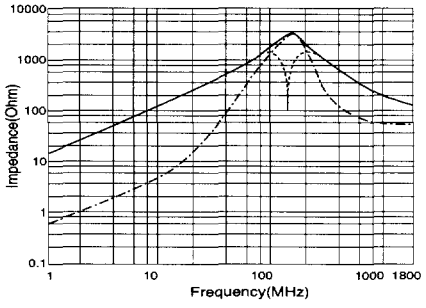
HB-1T2012-202J



HB-1B2012-222J



HB-1B2012-272J



• HB3216

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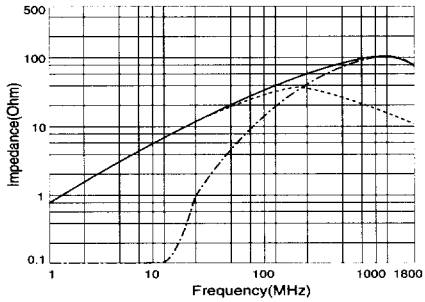
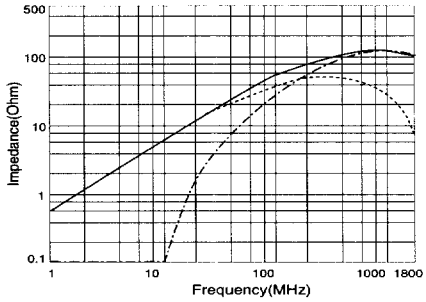
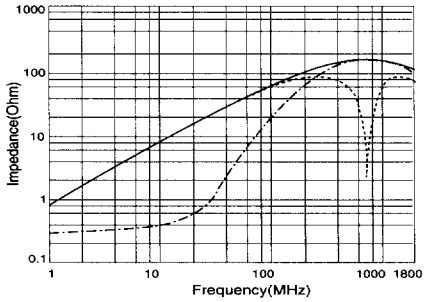
HB-1C3216-350J



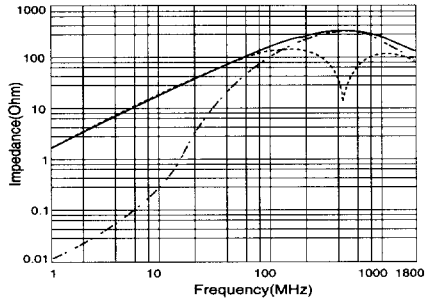
HB-1H3216-500J



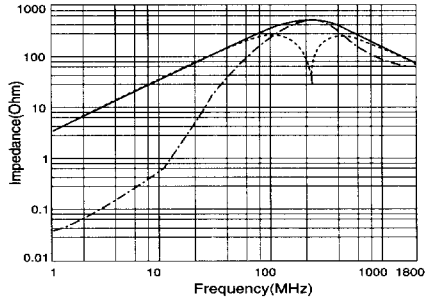
HB-1H3216-700J



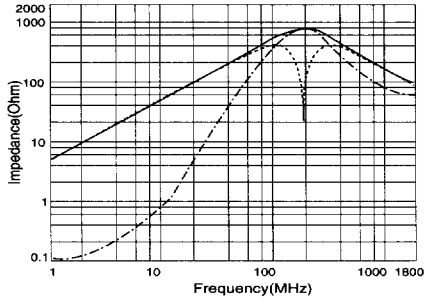
HB-1M3216-121J



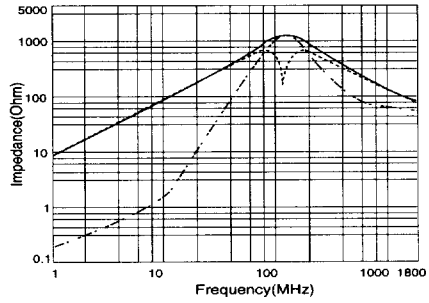
HB-1M3216-301J



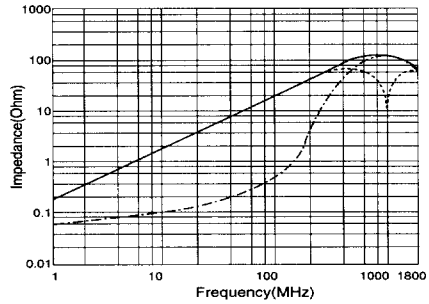
HB-1M3216-601J



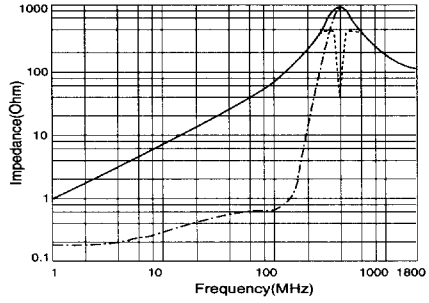
HB-1M3216-102J



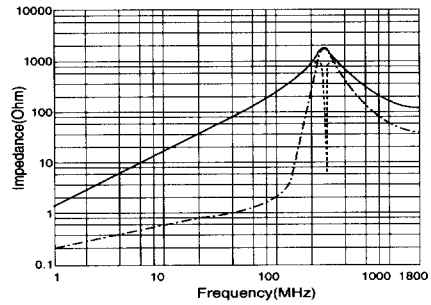
HB-1S3216-200J



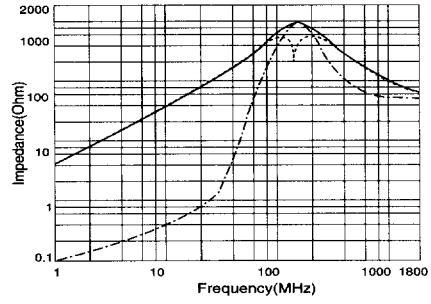
HB-1S3216-800J



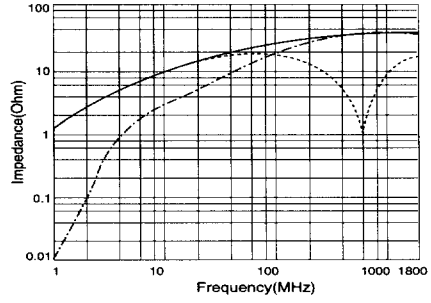
HB-1S3216-251J



HB-1S3216-601J



HB-1T3216-350J



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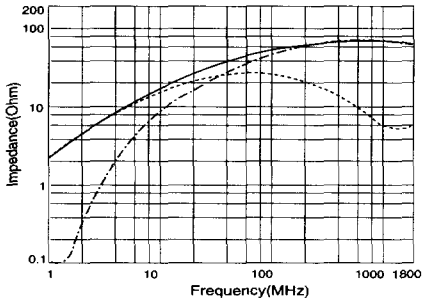
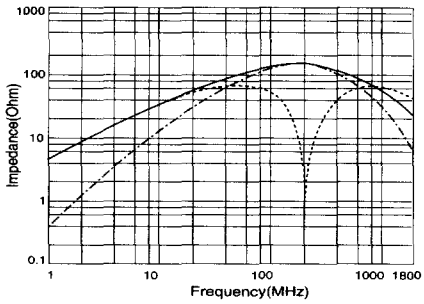
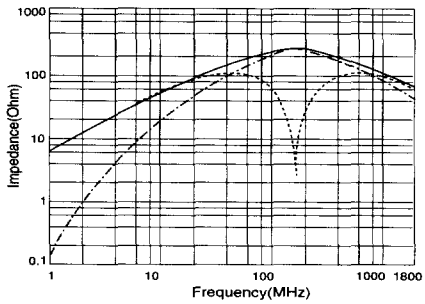
HB-1T3216-500J



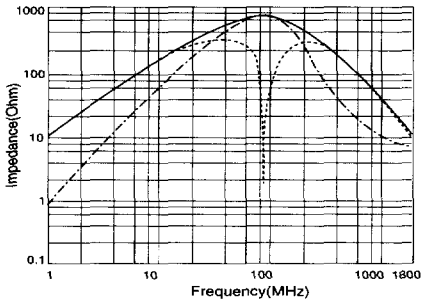
HB-1T3216-121J



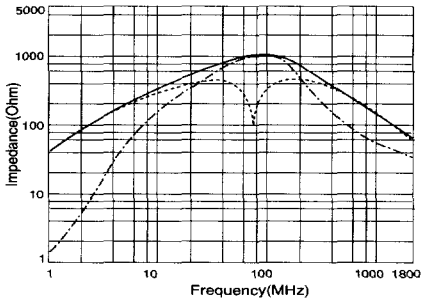
HB-1T3216-201J



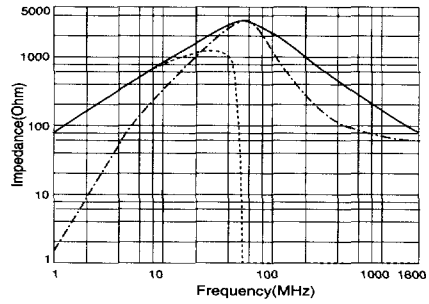
HB-1T3216-601J



HB-1T3216-102J

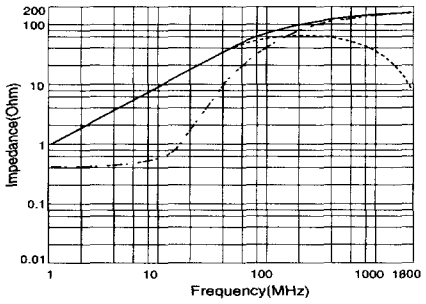


HB-1T3216-122J

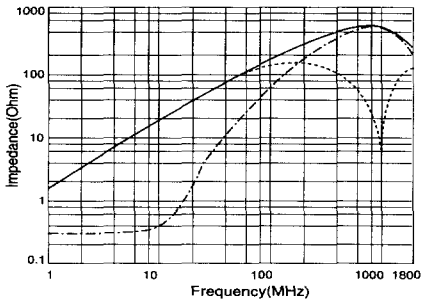


• HB4516

HB-1H4516-700J



HB-1M4516-151J



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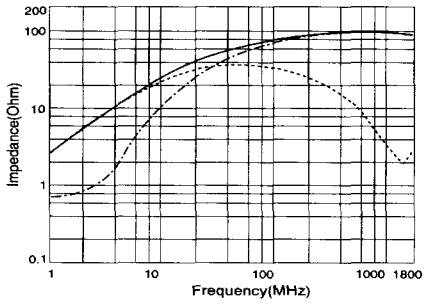
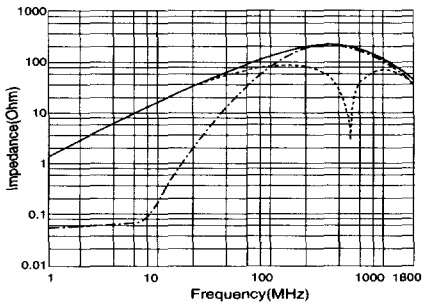
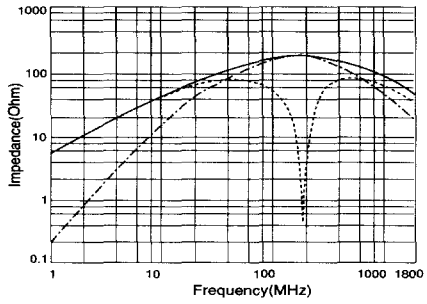


• HB4532

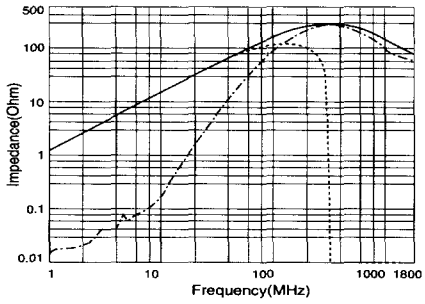
HB-1H4532-121J



HB-1T4532-121J



HB-1H4532-151J

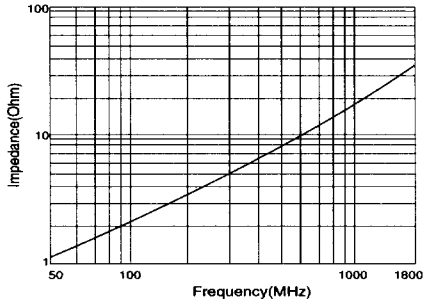


• HB series(For ultra high speed signal line)

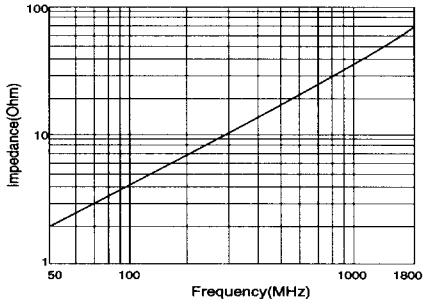
HB1608,HB2012

— Z --- R --- X

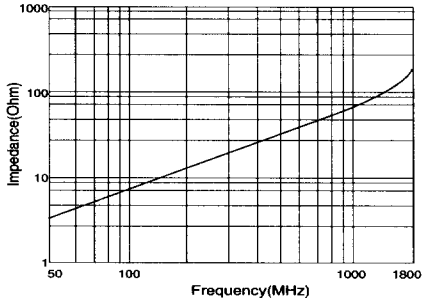
HB-1L1608-2R0



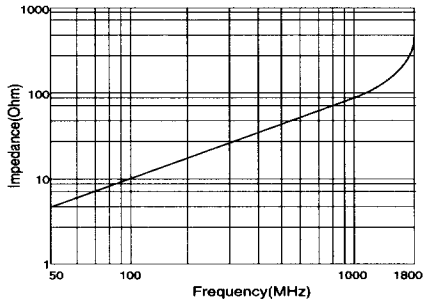
HB-1L1608-4R0



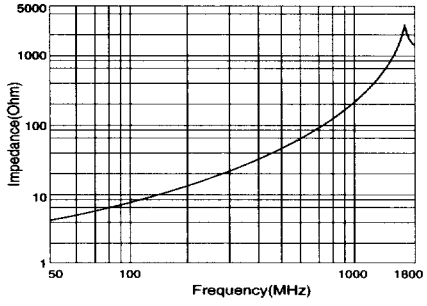
HB-1L1608-5R5



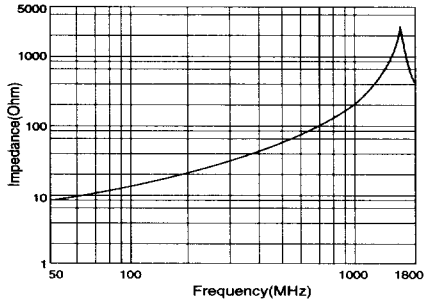
HB-1L1608-7R0



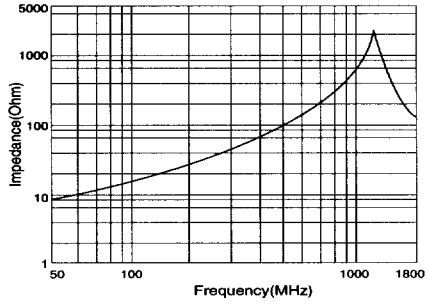
HB-1L1608-9R0



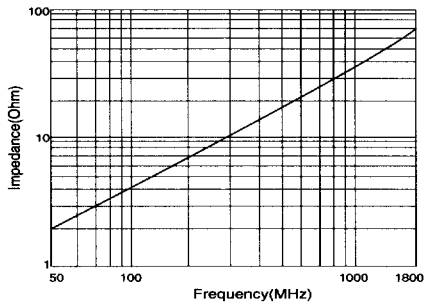
HB-1L1608-130



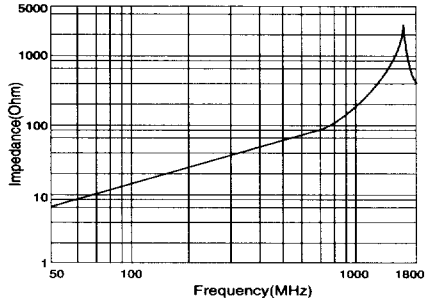
HB-1L1608-150



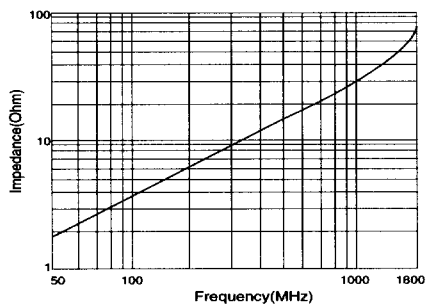
HB-1Y1608-4R0



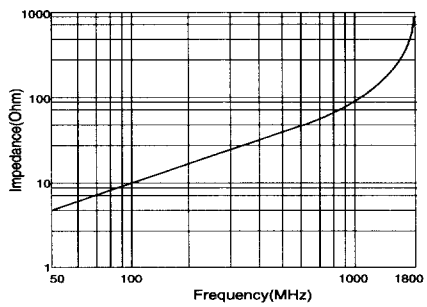
HB-1Y1608-100



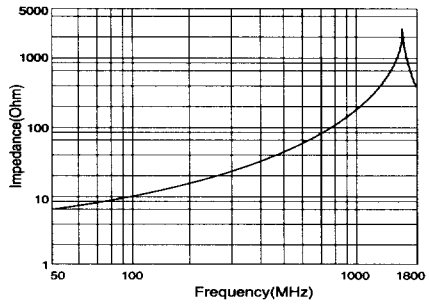
HB-1L2012-3R5



HB-1L2012-6R5



HB-1L2012-100



· HH,HU series

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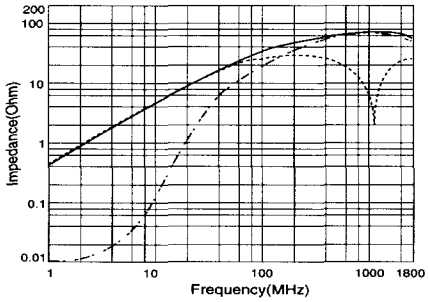
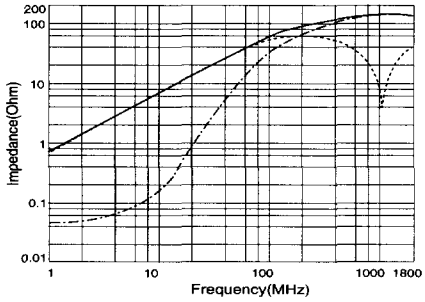
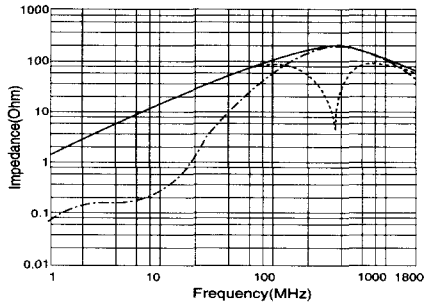
HH-1M1608-300J



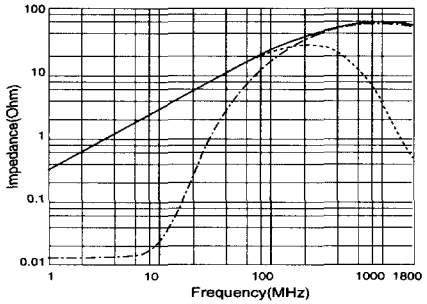
HH-1M1608-600J



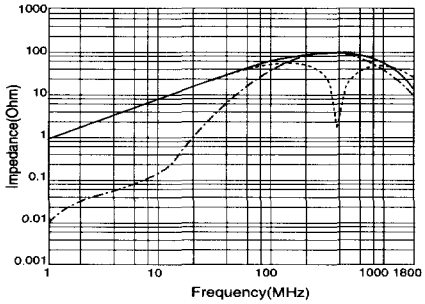
HH-1M1608-121J



HH-1H2012-260J



HH-1M2012-600J



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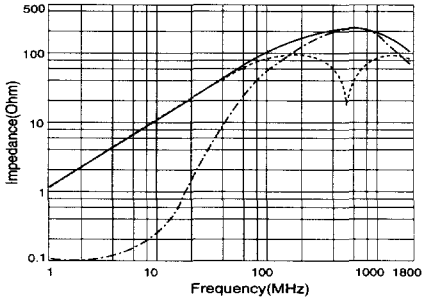
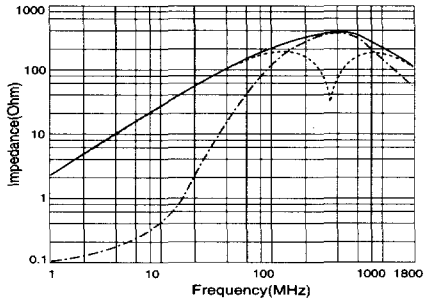
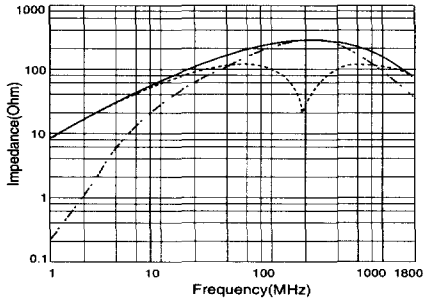


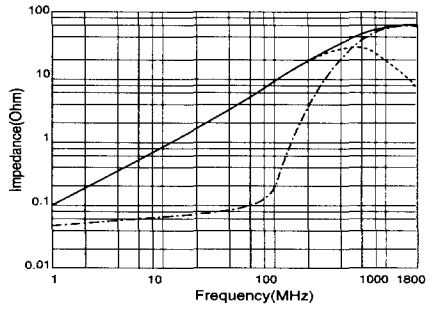
HH-1M2012-221J



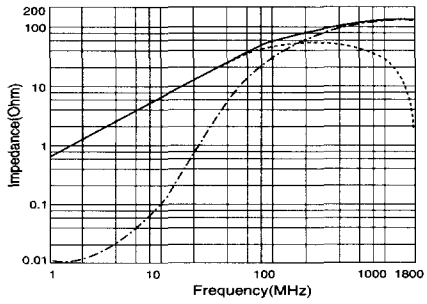
HH-1T2012-251J



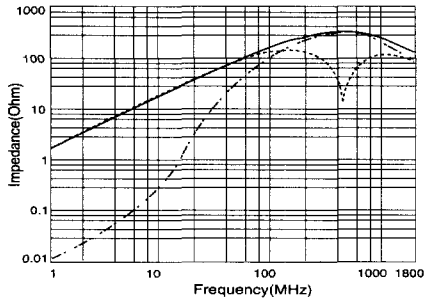
HH-1S2012-8R0



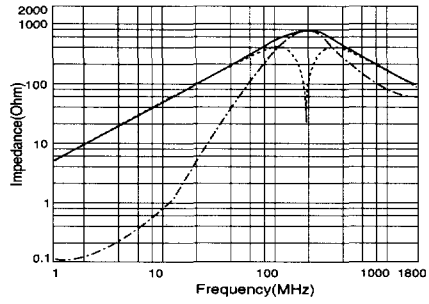
HH-1H3216-500J



HH-1M3216-121J

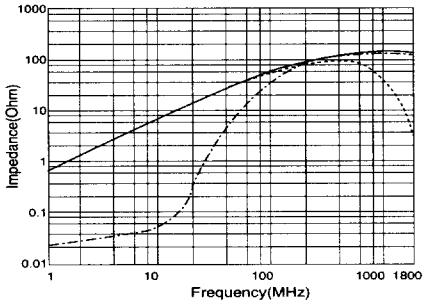


HH-1M3216-601J

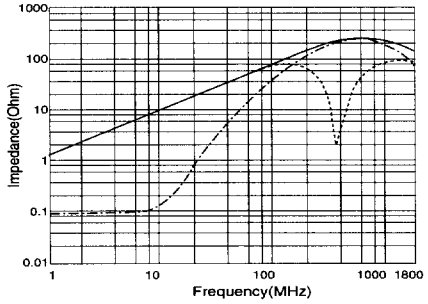


— Z - - - R --- X

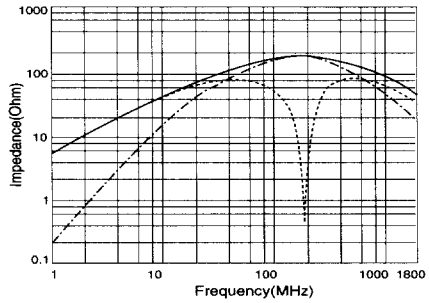
HH-1H4516-600J



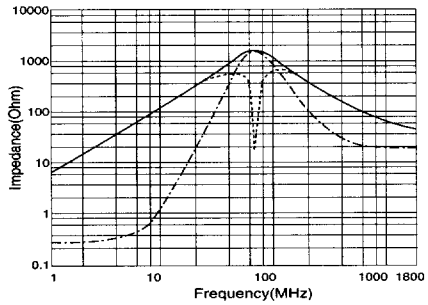
HH-1H4532-121J



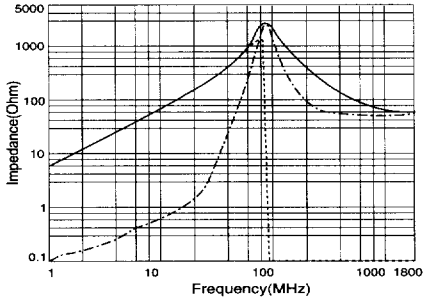
HH-1T4532-121J



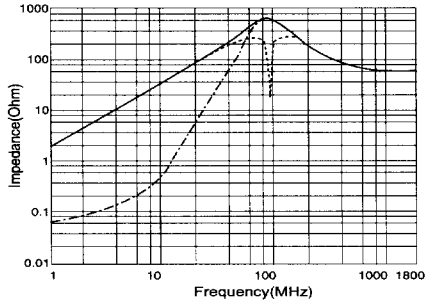
HH-1M4532-132J



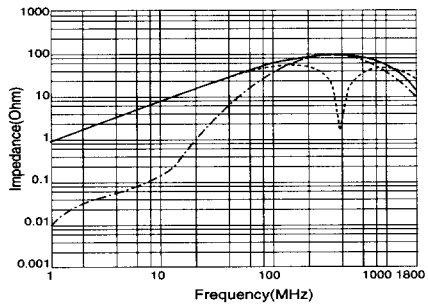
HH-1B4532-132J



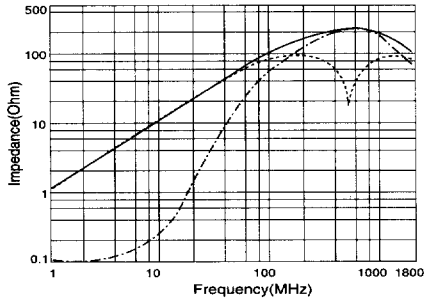
HH-1M5750-401J



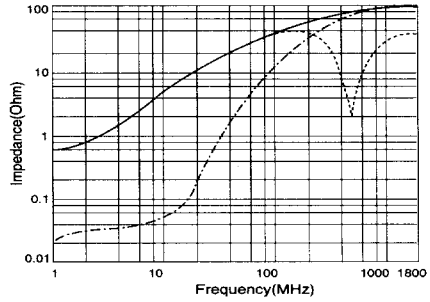
HU-1M2012-600J



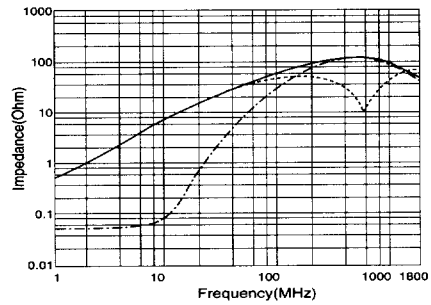
HU-1M2012-121J



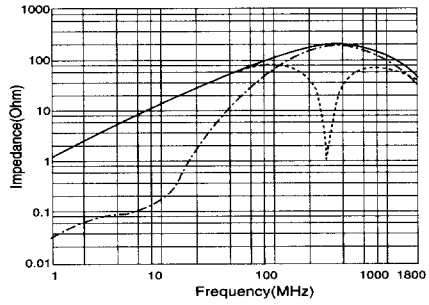
HU-1H3216-500J



HU-1H4516-600J



HU-1H4532-121J



HU-1M5750-401J