LARGE CURRENT MULTILAYER CHIP BEADS / LCB TYPE

FEATURES

- Low DCR, small package
- High current handling capacity
- Nickel barrier terminations provide excellent solder heat resistance
- Suitable for flow and reflow soldering and high current applications

APPLICATIONS

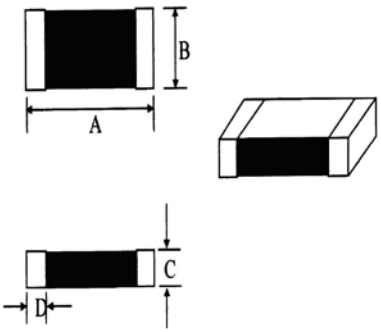
- Electronic games
- Personal computersHard disk drivers and other electronic equipments

ORDERING CODE

LCB 2012 – 121 □-N

- Note: lead-free
- Tolerance (Y:±25%)
- Inductance
- Dimension (AxB)
- Product Symbol

SHAPE



DIMENSIONS UNIT: mm (inch)

Part No.	A	B	C	D
LCB 1608 (0603)	1.6 ± 0.2	0.8 ± 0.2	0.8 ± 0.2	0.3 ± 0.2
LCB 2012 (0805)	2.0 ± 0.2	1.2 ± 0.2	0.9 ± 0.2	0.5 ± 0.3
LCB 3216 (1206)	3.2 ± 0.2	1.6 ± 0.2	1.1 ± 0.2	0.5 ± 0.3
LCB 4516 (1806)	4.5 ± 0.2	1.6 ± 0.2	1.6 ± 0.2	0.5 ± 0.3
LCB 4532 (1812)	4.5 ± 0.2	3.2 ± 0.2	1.5 ± 0.2	0.5 ± 0.3

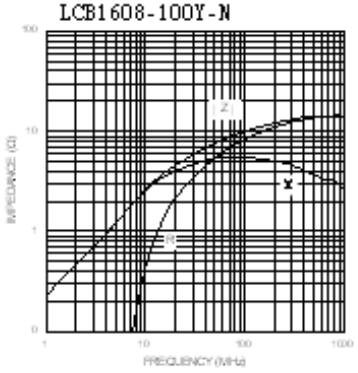
LARGE CURRENT MULTILAYER CHIP BEADS / LCB TYPE

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω) AT 100MHz	DC Resistance (Ω) Max	Rated Current (A) Max
LCB 1608-100 □-N	10	0.030	4.0
LCB 1608-300 □-N	30	0.050	3.0
LCB 1608-600 □-N	60	0.050	3.0
LCB 1608-121 □-N	120	0.100	2.0
LCB 1608-221 □-N	220	0.150	1.5
LCB 1608-301□-N	300	0.150	1.5
LCB 1608-601□-N	600	0.300	1.0
LCB 2012-110 □-N	11	0.010	6.0
LCB 2012-170 □-N	17	0.010	6.0
LCB 2012-220 □-N	22	0.010	6.0
LCB 2012-300 □-N	30	0.030	4.0
LCB 2012-600 □-N	60	0.050	3.0
LCB 2012-121 □-N	120	0.080	2.5
LCB 2012-221 □-N	220	0.100	2.0
LCB 2012-301 □-N	300	0.100	2.0
LCB 2012-601 □-N	600	0.300	1.0
LCB 2012-102 □-N	1000	0.300	1.0
LCB 3216-310 □-N	31	0.010	6.0
LCB 3216-500 □-N	50	0.025	3.0
LCB 3216-121 □-N	120	0.080	2.5
LCB 3216-301 □-N	300	0.080	2.5
LCB 3216-601 □-N	600	0.100	2.0
LCB 3216-102 □-N	1000	0.200	1.5
LCB 4516-600 □-N	60	0.010	6.0
LCB 4516-750 □-N	75	0.050	3.0
LCB 4516-800 □-N	80	0.050	3.0
LCB 4516-471 □-N	470	0.090	2.0
LCB 4532-700 □-N	70	0.030	6.0
LCB 4532-121 □-N	120	0.050	3.0

LARGE CURRENT MULTILAYER CHIP BEADS / LCB TYPE

LCB1608-100Y-N



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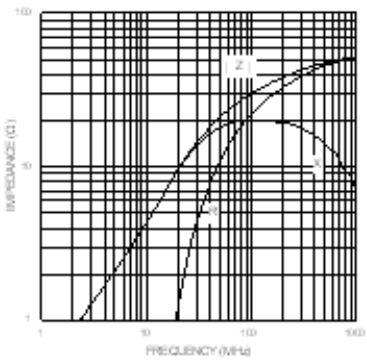

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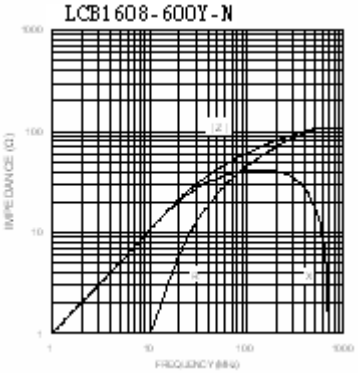

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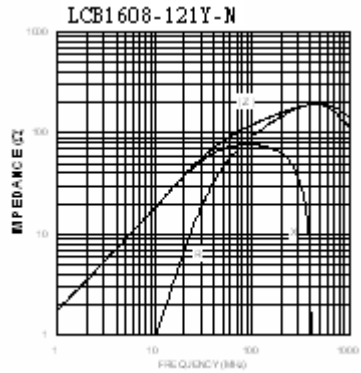

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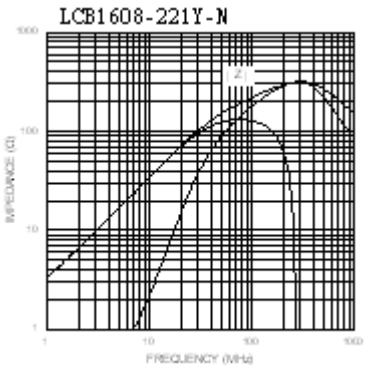

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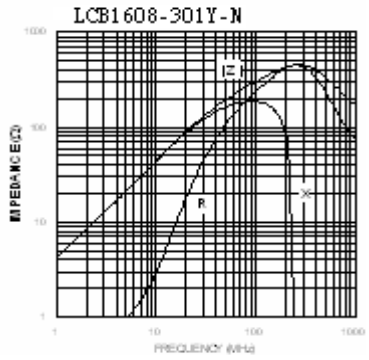

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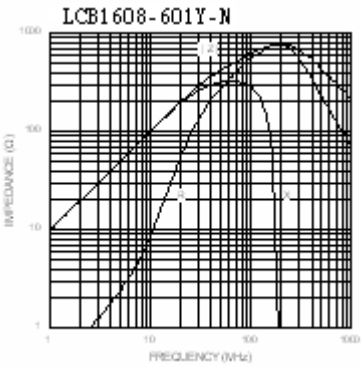

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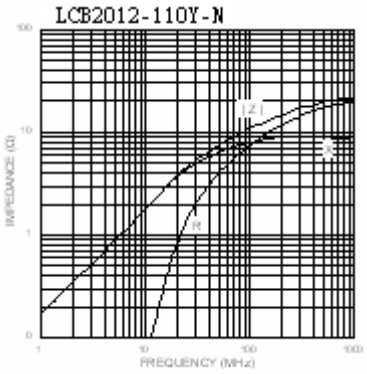

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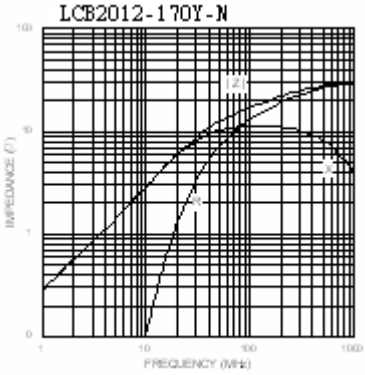

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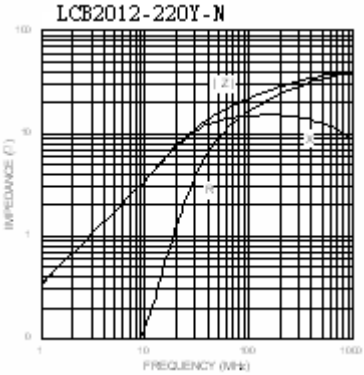

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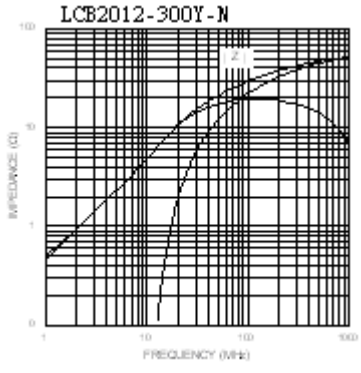

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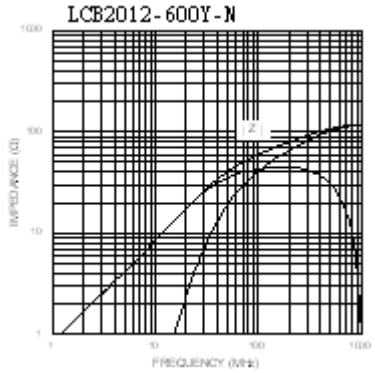
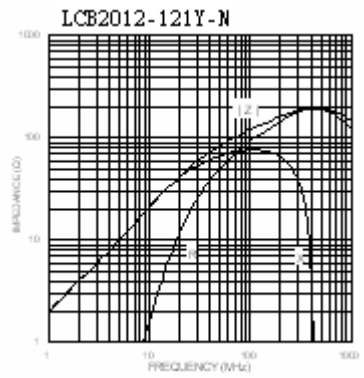


LARGE CURRENT MULTILAYER CHIP BEADS / LCB TYPE

LCB2012-121Y-N



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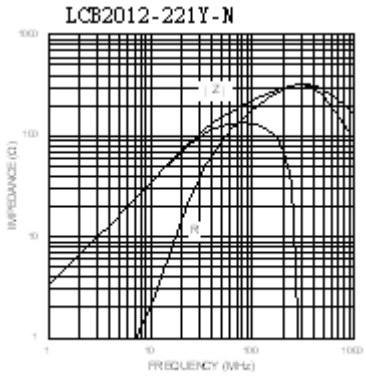

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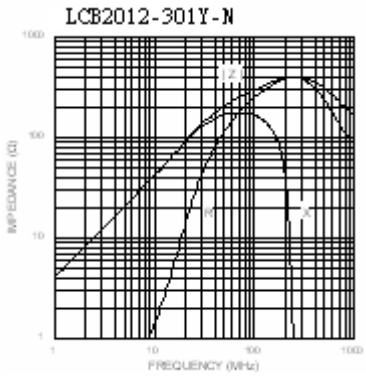

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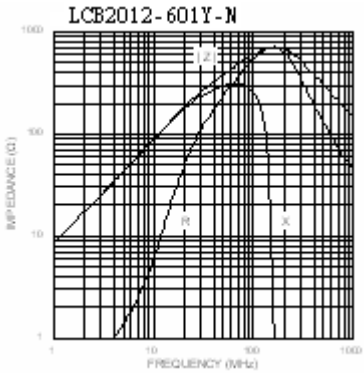

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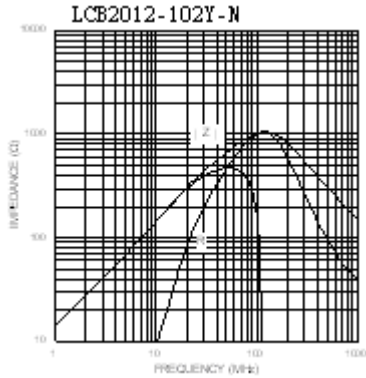

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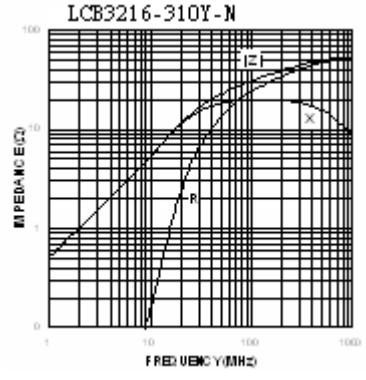

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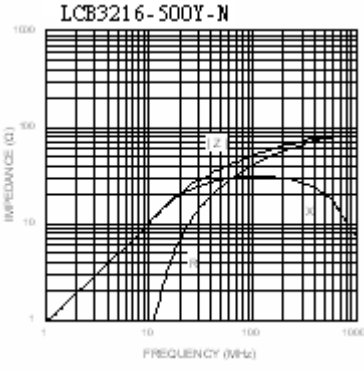

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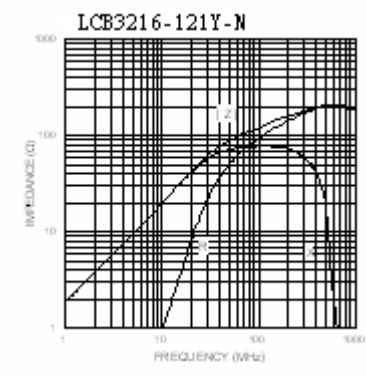

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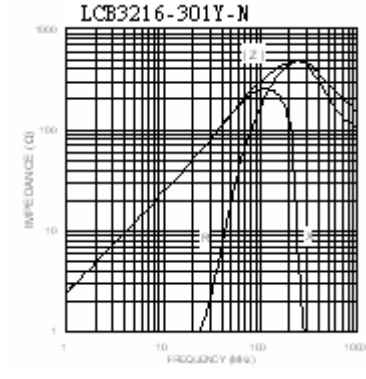

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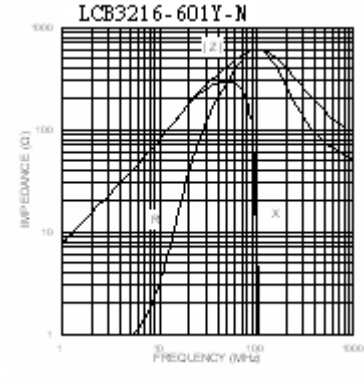

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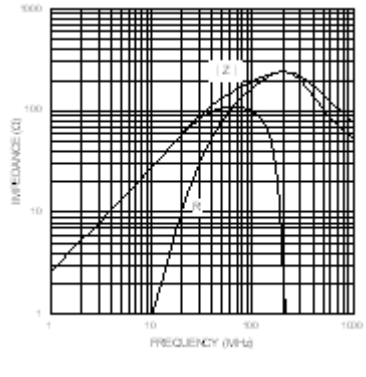

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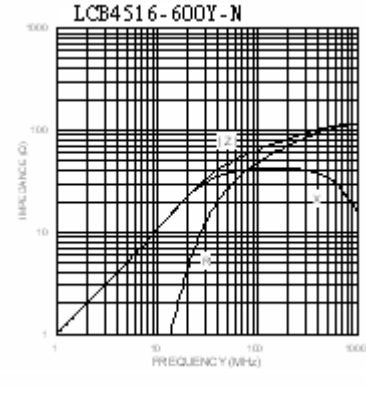
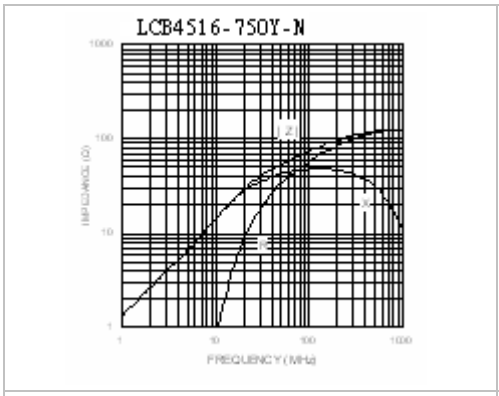
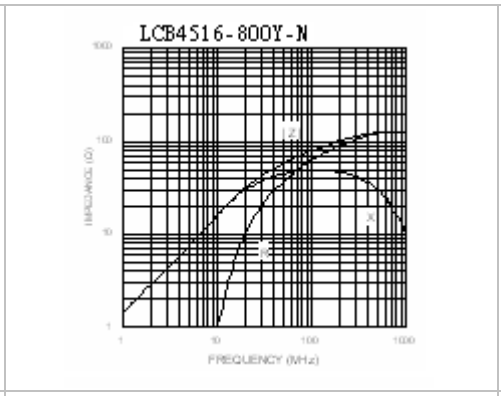
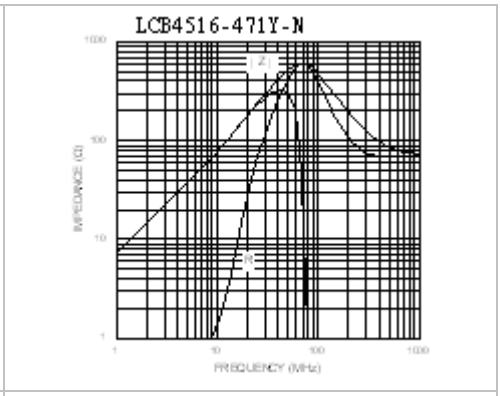
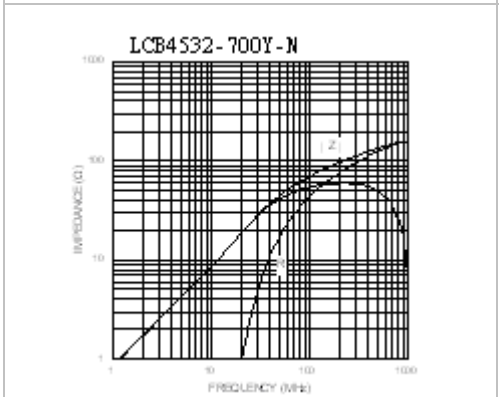


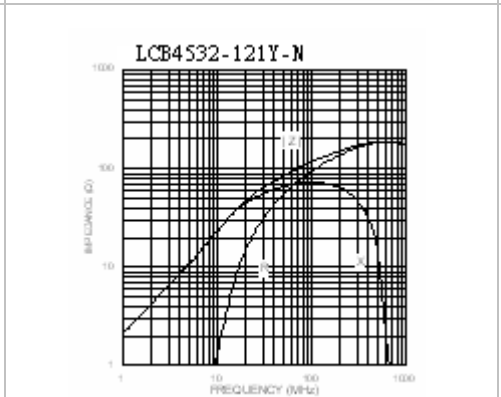
LARGE CURRENT MULTILAYER CHIP BEADS / LCB TYPE











LARGE CURRENT MULTILAYER CHIP BEADS / UCB TYPE

FEATURES

- Low DCR, small package
- High current handling capacity
- Nickel barrier terminations provide excellent solder heat resistance
- Suitable for flow and reflow soldering and high current applications

APPLICATIONS

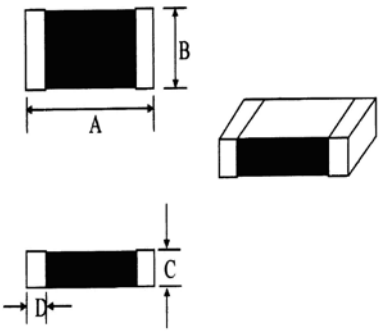
- Electronic games
- Personal computersHard disk drivers and other electronic equipments

ORDERING CODE

UCB 2012 – 600 □-N

- Note: lead-free
- Tolerance (Y:±25%)
- Inductance
- Dimension (AxB)
- Product Symbol

SHAPE



DIMENSIONS UNIT: mm (inch)

Part No.	A	B	C	D
UCB 1005 (0402)	1.0 ± 0.1	0.50 ± 0.1	0.5 ± 0.1	0.25 ± 0.1
UCB 1608 (0603)	1.6 ± 0.2	0.80 ± 0.2	0.8 ± 0.2	0.30 ± 0.2
UCB 2012 (0805)	2.0 ± 0.2	1.25 ± 0.2	0.9 ± 0.2	0.50 ± 0.3
UCB 3216 (1206)	3.2 ± 0.2	1.60 ± 0.2	1.1 ± 0.2	0.50 ± 0.3

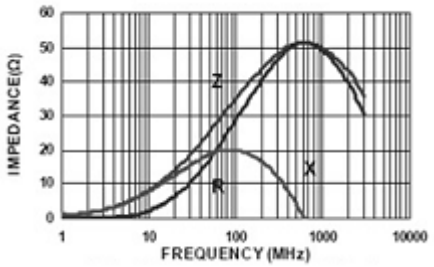
LARGE CURRENT MULTILAYER CHIP BEADS / UCB TYPE

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω) AT 100MHz	DC Resistance (Ω) Max	Rated Current (mA) Max
UCB 1005-330 □-N	33	0.022	3000
UCB 1005-600 □-N	60	0.032	2500
UCB 1005-800 □-N	80	0.038	2300
UCB 1005-121 □-N	120	0.055	2000
UCB 1005-181 □-N	180	0.090	1500
UCB 1005-221 □-N	220	0.100	1400
UCB 1005-331 □-N	330	0.150	1200
UCB 1005-471 □-N	470	0.200	1000
UCB 1608-100 □-N	10	0.010	5000
UCB 1608-300 □-N	30	0.015	4500
UCB 1608-600 □-N	60	0.020	4000
UCB 1608-101 □-N	100	0.030	3000
UCB 1608-121 □-N	120	0.030	3000
UCB 1608-181 □-N	180	0.050	2000
UCB 1608-221 □-N	220	0.040	2500
UCB 2012-150 □-N	15	0.012	6000
UCB 2012-220 □-N	22	0.012	6000
UCB 2012-300 □-N	30	0.012	6000
UCB 2012-500 □-N	50	0.015	6000
UCB 2012-600 □-N	60	0.018	6000
UCB 2012-800 □-N	80	0.020	6000
UCB 2012-101 □-N	100	0.020	5000
UCB 2012-121 □-N	120	0.020	5000
UCB 2012-201 □-N	200	0.040	3000
UCB 2012-221 □-N	220	0.040	3000
UCB 2012-301 □-N	300	0.050	3000
UCB 2012-331 □-N	330	0.050	3000
UCB 3216-300 □-N	30	0.012	6000
UCB 3216-600 □-N	60	0.012	6000
UCB 3216-800 □-N	80	0.012	6000
UCB 3216-101 □-N	100	0.012	6000
UCB 3216-121 □-N	120	0.012	6000
UCB 3216-151 □-N	150	0.020	4500
UCB 3216-181 □-N	180	0.020	4500
UCB 3216-221 □-N	220	0.020	4500

LARGE CURRENT MULTILAYER CHIP BEADS / UCB TYPE

UCB1005-330Y-N



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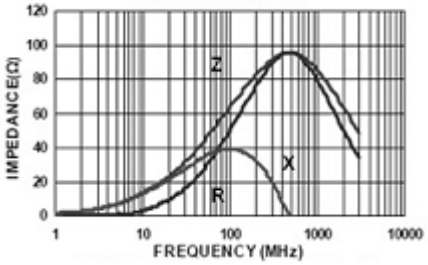

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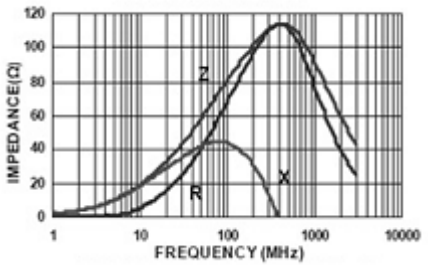
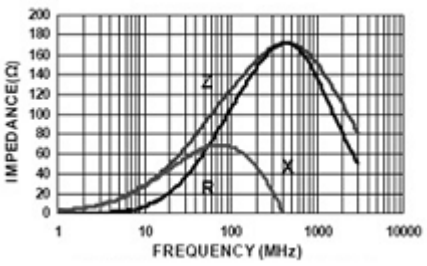
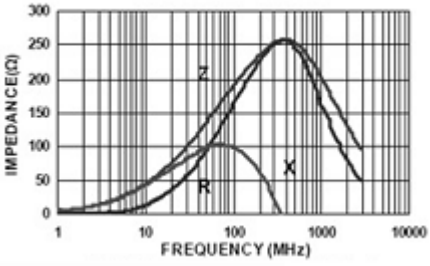


UCB1005-121Y-N



UCB1005-181Y-N



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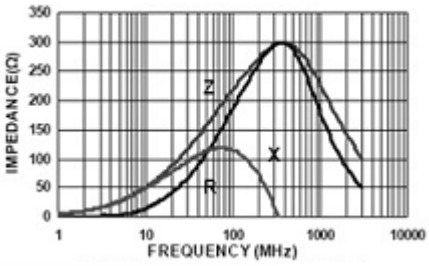

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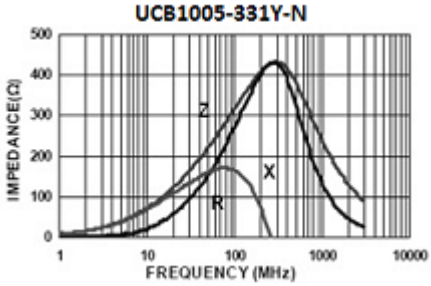

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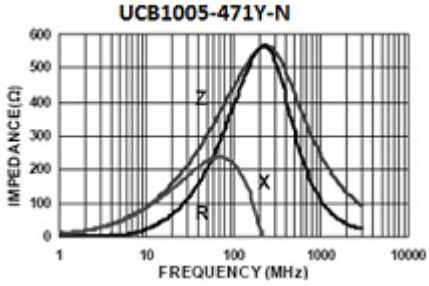

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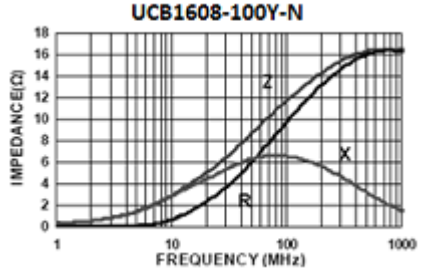

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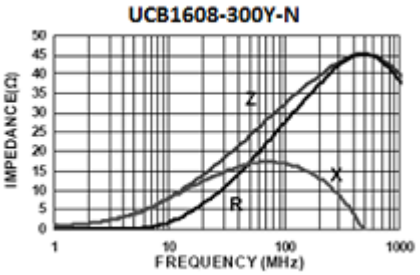

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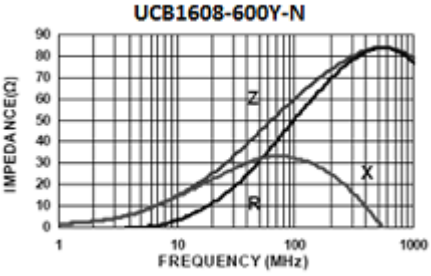
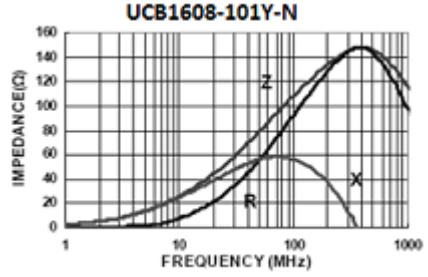
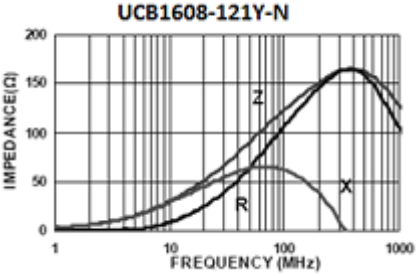


UCB1608-101Y-N



UCB1608-121Y-N



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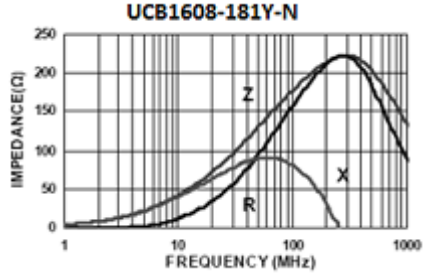

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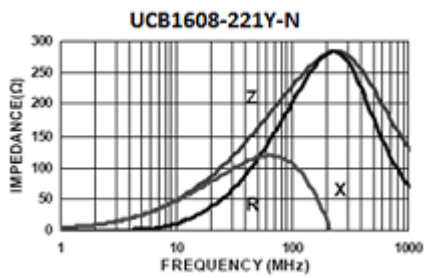
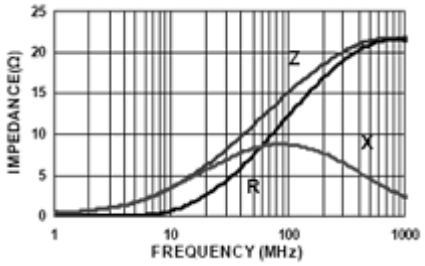


LARGE CURRENT MULTILAYER CHIP BEADS / UCB TYPE

UCB2012-150Y-N



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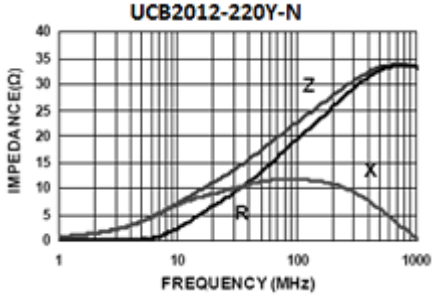

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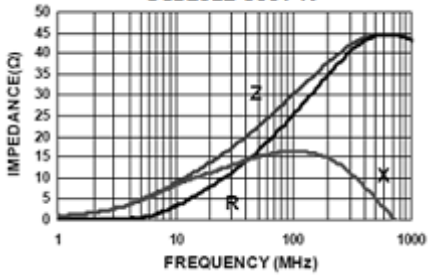

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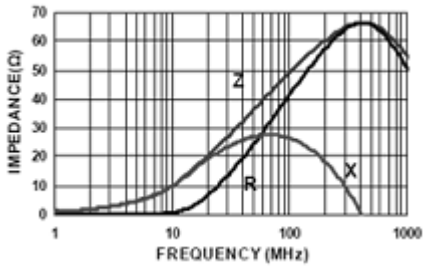
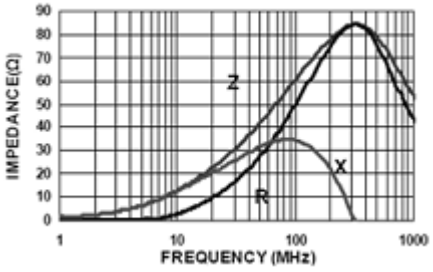
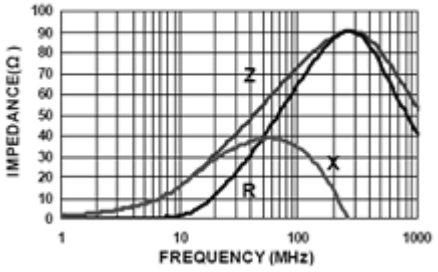


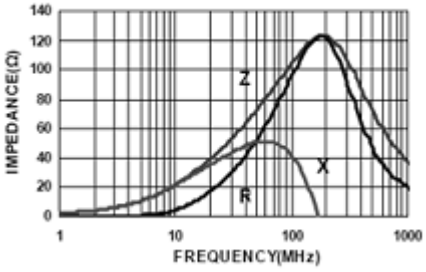
UCB2012-600Y-N



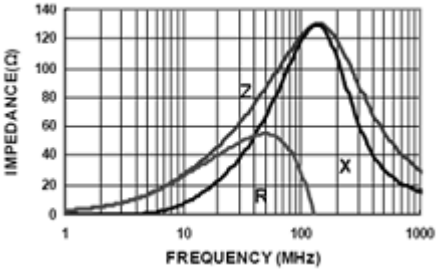
UCB2012-800Y-N



UCB2012-101Y-N



UCB2012-121Y-N



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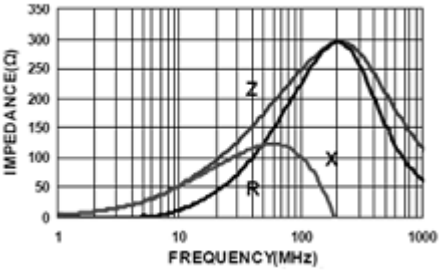

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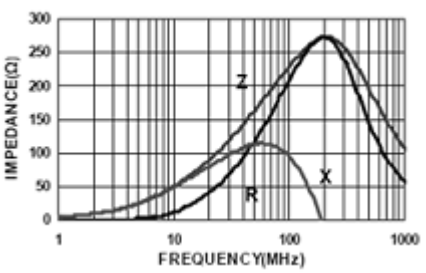
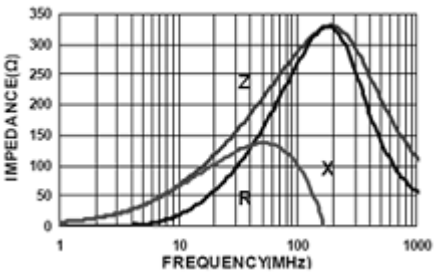
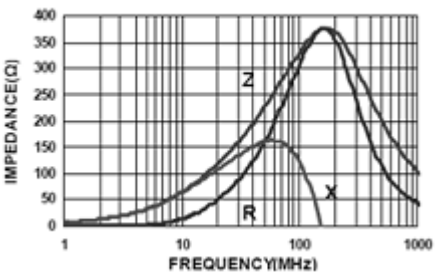


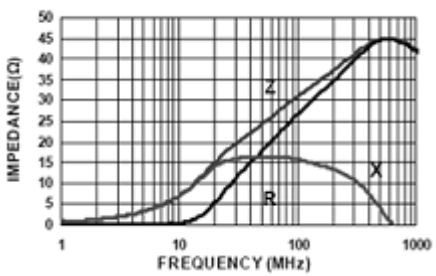
UCB2012-301Y-N



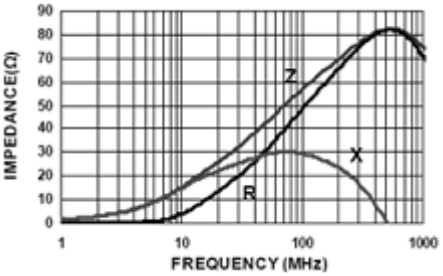
UCB2012-331Y-N



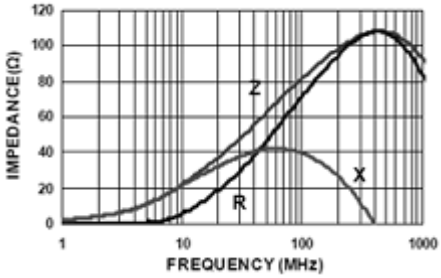
UCB3216-300Y-N



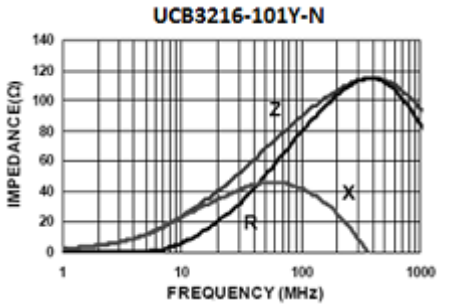
UCB3216-600Y-N

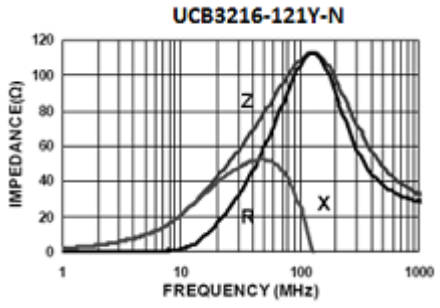


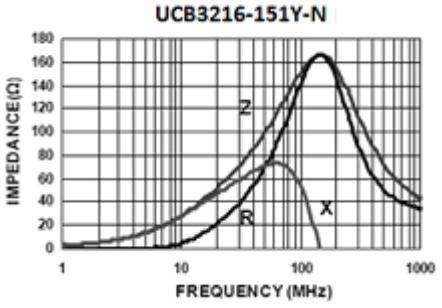
UCB3216-800Y-N

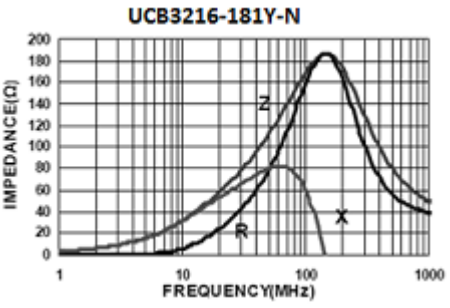


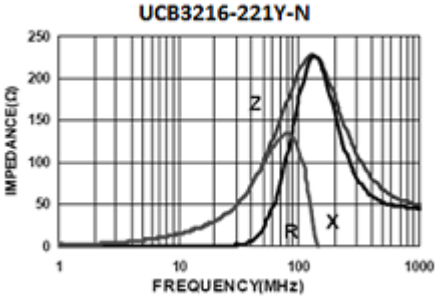
LARGE CURRENT MULTILAYER CHIP BEADS / UCB TYPE











MULTILAYER CHIP INDUCTORS / CL TYPE

FEATURES

- High mounting density of compact circuit due to crosstalk elimination that results from a closed magnetic flux in a ferrite material
- Suitable for flow and re-flow soldering
- Available in 3 sizes

APPLICATIONS

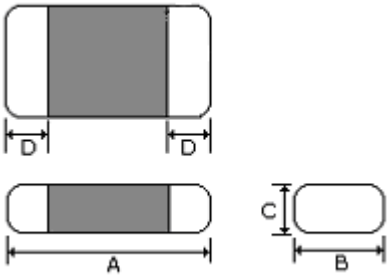
- Personal computers, HDDs, or other various electronic appliances.
- Any general circuit of portable equipment in which compact size and high mounting densities are required.

ORDERING CODE

CL 1608 – 8R2 □- N

- N: Note: lead-free
- □: Tolerance (K:±10%, M:±20%)
- 8R2: Inductance
- 1608: Dimension (AxB)
- CL: Product Symbol

SHAPES



DIMENSIONS UNIT: mm (inch)

Part No.	Dimensions			
	A	B	C	D
CL 1608 (0603)	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.30 ± 0.20
CL 2012 (0805)	2.00 ± 0.20	1.25 ± 0.20	0.85 ± 0.20	0.50 ± 0.30
CL 3216 (1206)	3.20 ± 0.20	1.60 ± 0.20	1.10 ± 0.30	0.50 ± 0.30

MULTILAYER CHIP INDUCTORS / CL TYPE

ELECTRICAL CHARACTERISTICS FOR CL1608

Part No.	Inductance (uH)	Test Freq. (MHz) 60mV	Q Min	Self Resonant FREQ. (MHz) Min	DC Resistance (Ω) Max	Rated Current (mA) Max
CL 1608-47N □-N	0.047	50	10	260	0.30	50
CL 1608-68N □-N	0.068	50	10	250	0.30	50
CL 1608-82N □-N	0.082	50	10	245	0.30	50
CL 1608-R10 □-N	0.10	25	15	240	0.50	50
CL 1608-R12 □-N	0.12	25	15	205	0.50	50
CL 1608-R15 □-N	0.15	25	15	180	0.60	50
CL 1608-R18 □-N	0.18	25	15	165	0.60	50
CL 1608-R22 □-N	0.22	25	15	150	0.80	50
CL 1608-R27 □-N	0.27	25	15	136	0.80	50
CL 1608-R33 □-N	0.33	25	15	125	0.85	35
CL 1608-R39 □-N	0.39	25	15	110	1.00	35
CL 1608-R47 □-N	0.47	25	15	105	1.35	35
CL 1608-R56 □-N	0.56	25	15	95	1.50	35
CL 1608-R68 □-N	0.68	25	15	85	1.70	35
CL 1608-R82 □-N	0.82	25	15	75	2.10	35
CL 1608-1R0 □-N	1.0	10	30	65	0.60	25
CL 1608-1R2 □-N	1.2	10	30	60	0.80	25
CL 1608-1R5 □-N	1.5	10	30	55	0.80	25
CL 1608-1R8 □-N	1.8	10	30	50	0.95	25
CL 1608-2R2 □-N	2.2	10	30	45	1.15	15
CL 1608-2R7 □-N	2.7	10	30	40	1.35	15
CL 1608-3R3 □-N	3.3	10	30	38	1.55	15
CL 1608-3R9 □-N	3.9	10	30	36	1.70	15
CL 1608-4R7 □-N	4.7	10	30	33	2.10	15
CL 1608-5R6 □-N	5.6	4	30	22	1.55	15
CL 1608-6R8 □-N	6.8	4	30	20	1.70	15
CL 1608-8R2 □-N	8.2	4	30	18	2.10	15
CL 1608-100 □-N	10	2	30	17	2.55	15

MULTILAYER CHIP INDUCTORS / CL TYPE

ELECTRICAL CHARACTERISTICS FOR CL2012

Part No.	Inductance (uH)	Test Freq. (MHz) 60mV	Q Min	Self Resonant FREQ. (MHz) Min	DC Resistance (Ω) Max	Rated Current (mA) Max
CL 2012-47N □-N	0.047	50	15	320	0.20	300
CL 2012-68N □-N	0.068	50	15	280	0.20	300
CL 2012-82N □-N	0.082	50	15	255	0.20	300
CL 2012-R10 □-N	0.10	25	20	235	0.30	250
CL 2012-R12 □-N	0.12	25	20	220	0.30	250
CL 2012-R15 □-N	0.15	25	20	200	0.40	250
CL 2012-R18 □-N	0.18	25	20	185	0.40	250
CL 2012-R22 □-N	0.22	25	20	170	0.50	250
CL 2012-R27 □-N	0.27	25	20	150	0.50	250
CL 2012-R33 □-N	0.33	25	20	145	0.55	250
CL 2012-R39 □-N	0.39	25	25	135	0.65	200
CL 2012-R47 □-N	0.47	25	25	125	0.65	200
CL 2012-R56 □-N	0.56	25	25	115	0.75	150
CL 2012-R68 □-N	0.68	25	25	105	0.80	150
CL 2012-R82 □-N	0.82	25	25	100	1.00	150
CL 2012-1R0 □-N	1.0	10	45	75	0.40	50
CL 2012-1R2 □-N	1.2	10	45	65	0.50	50
CL 2012-1R5 □-N	1.5	10	45	60	0.50	50
CL 2012-1R8 □-N	1.8	10	45	55	0.60	50
CL 2012-2R2 □-N	2.2	10	45	50	0.65	30
CL 2012-2R7 □-N	2.7	10	45	45	0.75	30
CL 2012-3R3 □-N	3.3	10	45	41	0.80	30
CL 2012-3R9 □-N	3.9	10	45	38	0.90	30
CL 2012-4R7 □-N	4.7	10	45	35	1.00	30
CL 2012-5R6 □-N	5.6	4	45	32	0.90	15
CL 2012-6R8 □-N	6.8	4	45	29	1.00	15
CL 2012-8R2 □-N	8.2	4	45	26	1.10	15
CL 2012-100 □-N	10	2	45	24	1.15	15

MULTILAYER CHIP INDUCTORS / CL TYPE

ELECTRICAL CHARACTERISTICS FOR CL3216

Part No.	Inductance (uH)	Test Freq. (MHz)	Q Min	Self Resonant FREQ. (MHz) Min	DC Resistance (Ω) Max	Rated Current (mA) Max
CL 3216-47N □-N	0.047	50	20	320	0.15	300
CL 3216-68N □-N	0.068	50	20	280	0.25	300
CL 3216-82N □-N	0.082	50	20	260	0.25	300
CL 3216-R10 □-N	0.10	25	25	235	0.25	250
CL 3216-R12 □-N	0.12	25	25	220	0.30	250
CL 3216-R15 □-N	0.15	25	25	200	0.30	250
CL 3216-R18 □-N	0.18	25	25	185	0.40	250
CL 3216-R22 □-N	0.22	25	25	170	0.40	250
CL 3216-R27 □-N	0.27	25	25	150	0.50	250
CL 3216-R33 □-N	0.33	25	25	145	0.50	250
CL 3216-R39 □-N	0.39	25	25	135	0.60	250
CL 3216-R47 □-N	0.47	25	25	125	0.60	200
CL 3216-R56 □-N	0.56	25	25	115	0.70	200
CL 3216-R68 □-N	0.68	25	25	105	0.80	150
CL 3216-R82 □-N	0.82	25	25	100	0.90	150
CL 3216-1R0 □-N	1.0	10	45	75	0.40	100
CL 3216-1R2 □-N	1.2	10	45	65	0.50	100
CL 3216-1R5 □-N	1.5	10	45	60	0.50	50
CL 3216-1R8 □-N	1.8	10	45	55	0.50	50
CL 3216-2R2 □-N	2.2	10	45	50	0.60	50
CL 3216-2R7 □-N	2.7	10	45	45	0.60	50
CL 3216-3R3 □-N	3.3	10	45	41	0.70	50
CL 3216-3R9 □-N	3.9	10	45	38	0.80	50
CL 3216-4R7 □-N	4.7	10	45	35	0.90	50
CL 3216-5R6 □-N	5.6	4	50	32	0.70	25
CL 3216-6R8 □-N	6.8	4	50	29	0.80	25
CL 3216-8R2 □-N	8.2	4	50	26	0.90	25
CL 3216-100 □-N	10	4	50	24	1.00	25

MULTILAYER HIGH CURRENT CHIP INDUCTORS / CL(C) TYPE

FEATURES

- High mounting density of compact circuit due to crosstalk elimination that results from a closed magnetic flux in a ferrite material
- Suitable for flow and re-flow soldering
- Available in 5sizes

APPLICATIONS

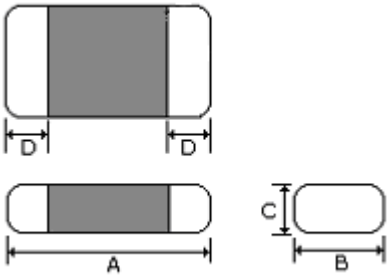
- Personal computers, HDDs, or other various electronic appliances.
- Any general circuit of portable equipment in which compact size and high mounting densities are required.

ORDERING CODE

CL 2012C 1R0 □- N

- Note: lead-free
- Tolerance (K:±10%, M:±20%)
- Inductance
- Dimension (AxB)
- Product Symbol

SHAPES



DIMENSIONS UNIT: mm (inch)

Part No.	Dimensions			
	A	B	C	D
CL 2012C (0805)	2.00 ± 0.20	1.25 ± 0.20	1.0 (Max)	0.50 ± 0.30
CL 2016C (0806)	2.00 ± 0.20	1.60 ± 0.20	1.0 (Max)	0.50 ± 0.30
CL 2520C (1008)	2.50 ± 0.20	2.00 ± 0.20	0.6 (Max)	0.50 ± 0.30

MULTILAYER HIGH CURRENT CHIP INDUCTORS / CL(C) TYPE

ELECTRICAL CHARACTERISTICS

Part No.	Inductance (uH)	Test Freq. (MHz)	DC Resistance (Ω) 30%	Rated Current (A) Max
CL2012C-1R0M-N	1.0	1	0.18	1.00
CL2012C-1R5M-N	1.5	1	0.20	0.90
CL2012C-2R2M-N	2.2	1	0.23	0.80
CL2012C-3R3M-N	3.3	1	0.23	0.80
CL2012C-4R7M-N	4.7	1	0.23	0.80
CL2016C-1R0M-N	1.0	1	0.12	1.30
CL2016C-1R5M-N	1.5	1	0.12	1.30
CL2016C-2R2M-N	2.2	1	0.14	1.20
CL2016C-3R3M-N	3.3	1	0.18	1.00
CL2016C-4R7M-N	4.7	1	0.23	0.90
CL2520C-1R0M-N	1.0	1	0.10	1.50
CL2520C-1R5M-N	1.5	1	0.12	1.40
CL2520C-2R2M-N	2.2	1	0.14	1.30
CL2520C-3R3M-N	3.2	1	0.18	1.20
CL2520C-4R7M-N	4.7	1	0.23	1.00
CL2520C-6R8M-N	6.8	1	0.25	0.90
CL2520C-100M-N	10	1	0.30	0.80

MULTILAYER HIGH FREQUENCY CHIP INDUCTORS / HCL TYPE

FEATURES

- Cost Effective
- Small size of 0603/ 1005/1608 is suitable for small portable equipment.
- Supports operating frequency up to 6GHz with nominal inductance values from 1.0nH to 220nH.
- Excellent Q factor and SRF characteristics.

APPLICATIONS

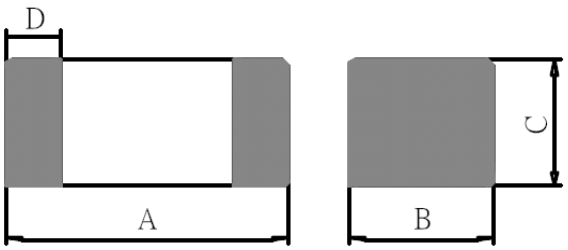
- Information technology equipments, computers, telecommunications, radar detectors, automotive electronics, cellular phones, pagers, PDAs, keyless remote systems.
- Use in L-C filter configurations

ORDERING CODE (HIGH FREQUENCY)

HCL 1608 – 1N5 □- N

- Note: lead-free
- Tolerance (S:±0.3nH, J:±5%, K:±10%)
- Inductance
- Dimension (AxB)
- Product Symbol

SHAPES



DIMENSIONS UNIT: mm (inch)

Part No.	Dimensions			
	A	B	C	D
HCL 0603 (0201)	0.60 ± 0.03	0.30 ± 0.03	0.30 ± 0.03	0.10 ~ 0.20
HCL 1005 (0402)	1.00 ± 0.10	0.50 ± 0.10	0.50 ± 0.10	0.25 ± 0.10
HCL 1608 (0603)	1.60 ± 0.15	0.80 ± 0.15	0.80 ± 0.15	0.30 ± 0.20
HCL 2012 (0805)	2.00 ± 0.20	1.25 ± 0.20	0.85 ± 0.20	0.50 ± 0.30

MULTILAYER HIGH FREQUENCY CHIP INDUCTORS / HCL TYPE

ELECTRICAL CHARACTERISTICS FOR HCL0603

Part No.	Inductance (nH)	Q Min	Test Freq. (MHz)	Self Resonant Freq. (GHz) MIN.	DC Resistance (Ω) Max	Rated Current (mA) Max
HCL 0603-1N0 □-N	1.0	4	100	10	0.14	250
HCL 0603-1N2 □-N	1.2	4	100	10	0.14	250
HCL 0603-1N5 □-N	1.5	4	100	10	0.18	230
HCL 0603-1N8 □-N	1.8	4	100	10	0.19	200
HCL 0603-2N2 □-N	2.2	4	100	8.8	0.22	200
HCL 0603-2N7 □-N	2.7	5	100	7.7	0.25	200
HCL 0603-3N3 □-N	3.3	5	100	6.7	0.30	180
HCL 0603-3N9 □-N	3.9	5	100	6.0	0.30	170
HCL 0603-4N7 □-N	4.7	5	100	5.3	0.40	150
HCL 0603-5N1 □-N	5.1	5	100	4.7	0.40	150
HCL 0603-5N6 □-N	5.6	5	100	4.2	0.40	150
HCL 0603-6N8 □-N	6.8	5	100	3.5	0.50	150
HCL 0603-8N2 □-N	8.2	5	100	3.2	0.55	150
HCL 0603-10N □-N	10	5	100	2.8	0.65	150
HCL 0603-12N □-N	12	5	100	2.4	0.70	100
HCL 0603-15N □-N	15	5	100	2.2	0.80	100
HCL 0603-18N □-N	18	5	100	2.1	0.90	100
HCL 0603-22N □-N	22	5	100	1.8	1.20	100
HCL 0603-27N □-N	27	4	100	1.8	1.80	50
HCL 0603-33N □-N	33	4	100	1.7	2.10	50
HCL 0603-39N □-N	39	4	100	1.5	2.40	50

MULTILAYER HIGH FREQUENCY CHIP INDUCTORS / HCL TYPE

ELECTRICAL CHARACTERISTICS FOR HCL1005

Part No.	Inductance (nH)	Q Min	Test Freq. (MHz)	Self Resonant Freq. (MHz) MIN.	DC Resistance (Ω) Max	Rated Current (mA) Max
HCL 1005-1N0 □-N	1.0	8	100	10000	0.10	400
HCL 1005-1N2 □-N	1.2	8	100	10000	0.10	400
HCL 1005-1N5 □-N	1.5	8	100	9000	0.10	400
HCL 1005-1N8 □-N	1.8	8	100	8700	0.10	400
HCL 1005-2N2 □-N	2.2	8	100	8100	0.15	400
HCL 1005-2N7 □-N	2.7	8	100	7700	0.15	400
HCL 1005-3N3 □-N	3.3	8	100	6300	0.15	400
HCL 1005-3N9 □-N	3.9	8	100	6100	0.20	400
HCL 1005-4N7 □-N	4.7	8	100	5400	0.20	400
HCL 1005-5N6 □-N	5.6	8	100	5100	0.20	400
HCL 1005-6N8 □-N	6.8	8	100	4550	0.25	400
HCL 1005-8N2 □-N	8.2	8	100	4100	0.30	300
HCL 1005-10N □-N	10	8	100	3900	0.35	300
HCL 1005-12N □-N	12	8	100	3000	0.40	300
HCL 1005-15N □-N	15	8	100	2800	0.50	300
HCL 1005-18N □-N	18	8	100	2500	0.55	300
HCL 1005-22N □-N	22	8	100	2200	0.70	300
HCL 1005-27N □-N	27	8	100	2000	0.80	300
HCL 1005-33N □-N	33	8	100	1800	0.90	200
HCL 1005-39N □-N	39	8	100	1600	1.00	150
HCL 1005-47N □-N	47	8	100	1400	1.20	150
HCL 1005-56N □-N	56	8	100	1300	1.30	150
HCL 1005-68N □-N	68	8	100	1100	1.50	100
HCL 1005-82N □-N	82	8	100	1000	1.60	100
HCL 1005-R10 □-N	100	8	100	900	2.00	100

MULTILAYER HIGH FREQUENCY CHIP INDUCTORS / HCL TYPE

ELECTRICAL CHARACTERISTICS FOR HCL1608

Part No.	Inductance (nH)	Q Min	Test Freq. (MHz)	Self Resonant Freq. (MHz) MIN.	DC Resistance (Ω) Max	Rated Current (mA) Max
HCL 1608-1N0 □-N	1.0	8	100	10000	0.10	600
HCL 1608-1N2 □-N	1.2	8	100	10000	0.10	600
HCL 1608-1N5 □-N	1.5	8	100	8000	0.10	600
HCL 1608-1N8 □-N	1.8	8	100	8000	0.10	600
HCL 1608-2N2 □-N	2.2	8	100	7200	0.10	600
HCL 1608-2N7 □-N	2.7	10	100	6200	0.10	600
HCL 1608-3N3 □-N	3.3	10	100	5200	0.12	600
HCL 1608-3N9 □-N	3.9	10	100	5000	0.14	600
HCL 1608-4N7 □-N	4.7	10	100	4750	0.16	600
HCL 1608-5N6 □-N	5.6	10	100	4100	0.18	600
HCL 1608-6N8 □-N	6.8	10	100	3750	0.22	600
HCL 1608-8N2 □-N	8.2	10	100	3300	0.24	600
HCL 1608-10N □-N	10	12	100	3000	0.26	600
HCL 1608-12N □-N	12	12	100	2600	0.28	600
HCL 1608-15N □-N	15	12	100	2500	0.32	600
HCL 1608-18N □-N	18	12	100	2400	0.35	600
HCL 1608-22N □-N	22	12	100	2000	0.40	500
HCL 1608-27N □-N	27	12	100	1900	0.45	500
HCL 1608-33N □-N	33	12	100	1600	0.55	400
HCL 1608-39N □-N	39	12	100	1400	0.60	400
HCL 1608-47N □-N	47	12	100	1300	0.70	400
HCL 1608-56N □-N	56	12	100	1100	0.75	400
HCL 1608-68N □-N	68	12	100	1050	0.85	400
HCL 1608-82N □-N	82	12	100	900	1.00	300
HCL 1608-R10 □-N	100	12	100	770	1.20	300
HCL 1608-R12 □-N	120	8	50	650	1.30	300
HCL 1608-R15 □-N	150	8	50	550	1.70	250
HCL 1608-R18 □-N	180	8	50	520	1.90	250
HCL 1608-R22 □-N	220	8	50	500	2.00	250

MULTILAYER HIGH FREQUENCY CHIP INDUCTORS / HCL TYPE

ELECTRICAL CHARACTERISTICS FOR HCL2012

Part No.	Inductance (nH)	Q Min	Test Freq. (MHz)	Self Resonant Freq. (MHz) MIN.	DC Resistance (Ω) Max	Rated Current (mA) Max
HCL 2012-1N5 □-N	1.5	10	100	4000	0.10	300
HCL 2012-1N8 □-N	1.8	10	100	4000	0.10	300
HCL 2012-2N2 □-N	2.2	10	100	4000	0.10	300
HCL 2012-2N7 □-N	2.7	12	100	4000	0.10	300
HCL 2012-3N3 □-N	3.3	12	100	4000	0.13	300
HCL 2012-3N9 □-N	3.9	12	100	4000	0.15	300
HCL 2012-4N7 □-N	4.7	12	100	3500	0.20	300
HCL 2012-5N6 □-N	5.6	12	100	3200	0.23	300
HCL 2012-6N8 □-N	6.8	15	100	2800	0.25	300
HCL 2012-8N2 □-N	8.2	15	100	2400	0.28	300
HCL 2012-10N □-N	10	15	100	2100	0.30	300
HCL 2012-12N □-N	12	15	100	1900	0.35	300
HCL 2012-15N □-N	15	15	100	1600	0.40	300
HCL 2012-18N □-N	18	15	100	1500	0.45	300
HCL 2012-22N □-N	22	18	100	1400	0.50	300
HCL 2012-27N □-N	27	18	100	1300	0.55	300
HCL 2012-33N □-N	33	18	100	1200	0.60	300
HCL 2012-39N □-N	39	18	100	1000	0.65	300
HCL 2012-47N □-N	47	18	100	900	0.70	300
HCL 2012-56N □-N	56	18	100	800	0.75	300
HCL 2012-68N □-N	68	18	100	700	0.80	300
HCL 2012-82N □-N	82	18	100	600	0.90	300
HCL 2012-R10 □-N	100	18	100	600	0.90	300

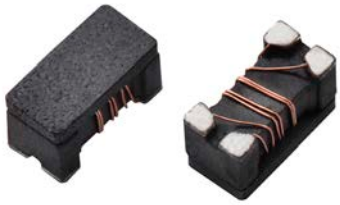
SMD COMMON MODE CHOKE / WCB TYPE

FEATURES

Miniature SMD type common mode filter for fully automated assembly.

Wide impedance rage (90Ω~2200Ω) for noise suppression.

Excellent Solderability.

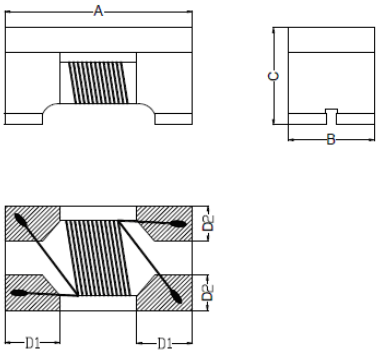


ORDERING CODE

WCB 2012 - 900 Y-N

- Note: lead-free
- Tolerance (Y:±25%)
- Impedance
- Dimension (AxB)
- SMD Common Mode

SHAPES



DIMENSIONS (UNIT: mm)

Part No.	A (±0.2)	B (±0.2)	C (±0.2)	D1 (Ref.)	D2 (Ref.)
WCB 2012	2.00	1.20	1.20	0.55	0.46
WCB 3216	3.20	1.60	2.00	0.50	0.50

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)100MHz	DC Resistance (Ω) Max	Rated Current (mA)Max
WCB 2012-900Y-N	90	0.30	400
WCB 2012-121Y-N	120	0.15	400
WCB 2012-161Y-N	160	0.35	350
WCB 2012-221Y-N	220	0.40	300
WCB 3216-900Y-N	90	0.30	400
WCB 3216-161Y-N	160	0.35	350
WCB 3216-221Y-N	220	0.45	300

SMD COMMON MODE CHOKE / WCB(B/C/D/E) TYPE

FEATURES

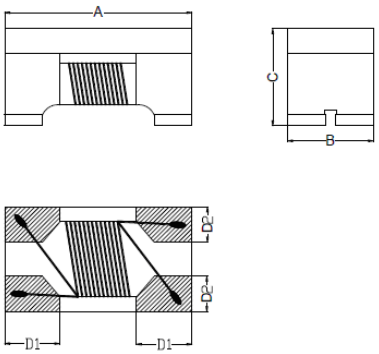
High common mode impedance at noise band and low differential mode impedance at signal band. Due to the low differential mode impedance with high coupling factor, there is almost no distortion on high speed transmission of high resolution video signals.

ORDERING CODE

WCB 1210 D – 250 □ -N

- Note: lead-free
- Tolerance (Y:±25%)
- Impedance
- Type:
  - B= 3.5GHz
  - C= 6GHz
  - D= USB3.0
  - E= USB3.1
- Dimension
- Product Symbol

SHAPES



DIMENSIONS (UNIT: mm)

Part No.	A	B	C	D1 (Ref.)	D2 (Ref.)
WCB 1210	1.20 ± 0.2	1.00 ± 0.2	0.90 MAX	0.33	0.36
WCB 2012	2.00 ± 0.2	1.20 ± 0.2	1.20 ± 0.2 or 1.3 ± 0.2	0.45	0.40

SMD COMMON MODE CHOKE / WCB(B/C/D/E) TYPE

ELECTRICAL CHARACTERISTICS FOR WCB 1210D/E

Part No.	Impedance (Ω)100MHz	DC Resistance (Ω) Max	Rated Current (mA)Max
WCB1210D-250Y-N	25(TYP)	0.30	300
WCB1210D-600Y-N	60(TYP)	0.40	300
WCB1210D-900Y-N	90(TYP)	0.50	280
WCB1210E-900Y-N	90(TYP)	0.50	280

ELECTRICAL CHARACTERISTICS FOR WCB 2012B/C/D/E

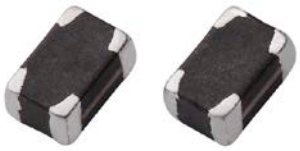
Part No.	Impedance (Ω)100MHz	DC Resistance (Ω) Max	Rated Current (mA)Max
WCB2012B-900Y-N	90(TYP)	0.30	300
WCB2012C-240Y-N	24(TYP)	0.20	300
WCB2012C-300Y-N	30(TYP)	0.20	300
WCB2012C-600Y-N	60(TYP)	0.30	300
WCB2012C-900Y-N	90(TYP)	0.30	300
WCB2012D-120Y-N	12(TYP)	0.25	420
WCB2012D-240Y-N	24(TYP)	0.25	420
WCB2012D-250Y-N	25(TYP)	0.22	420
WCB2012D-320Y-N	32(TYP)	0.25	400
WCB2012D-600Y-N	60(TYP)	0.30	300
WCB2012D-900Y-N	90(TYP)	0.30	300
WCB2012E-900Y-N	90(TYP)	0.30	300

＊Test Frequency : 100MHZ/0.5V

SMD MULTILAYER COMMON MODE CHIP BEADS / WCM TYPE

FEATURES

- High coupling constant.
- Small size and low profile.
- Small dimension enable higher density packaging.
- Excellent Solderability.

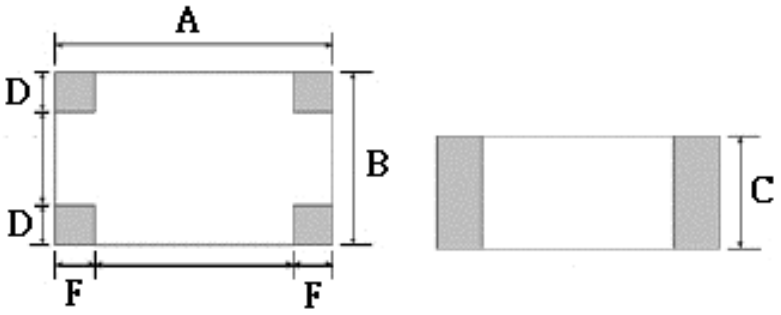


ORDERING CODE

WCM 2012 - 900 M-N

- Note: lead-free
- Tolerance (M:±20%)
- Impedance
- Dimension (AxB)
- SMD Common Mode

SHAPES



DIMENSIONS (UNIT: mm)

Part No.	A	B	C	D (Ref.)	F (Ref.)
WCM 2012	2.00 ± 0.2	1.25 ± 0.2	1.00 ± 0.2	0.35	0.40

ELECTRICAL CHARACTERISTICS

Part No.	Impedance (Ω)100MHz	DC Resistance (Ω) Max	Rated Current (mA)Max
WCM 2012-670M-N	67	0.80	400
WCM 2012-900M-N	90	0.85	400
WCM 2012-121M-N	120	0.90	300

CORE MASTER ENTERPRISE CO., LTD.
http://www.coremaster.com.tw

SMD MULTILAYER FERRITE CHIP BEADS / CB TYPE

FEATURES

- Suitable for flow and reflow soldering
- Impedance over a broad frequency range
- Standard type used to suppress lower-frequency, lower current signals

APPLICATIONS

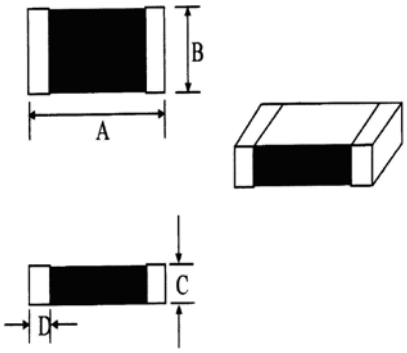
- Consumer electronic products
- Computer and peripheral products
- I/O ports, DC power lines and Signal lines

ORDERING CODE

CB 1005 - 600 □ -N

- Note: lead-free
- Tolerance (Y:±25%)
- Impedance
- Dimension (AxB)
- Product Symbol

SHAPE



DIMENSIONS UNIT: mm (inch)

Part No.	A	B	C	D
CB 0603 (0201)	0.6 ± 0.03	0.3 ± 0.03	0.3 ± 0.03	0.10 ~ 0.20
CB 1005 (0402)	1.0 ± 0.10	0.5 ± 0.1	0.5 ± 0.1	0.25 ± 0.15
CB 1608 (0603)	1.6 ± 0.20	0.8 ± 0.2	0.8 ± 0.2	0.30 ± 0.20
CB 2012 (0805)	2.0 ± 0.20	1.2 ± 0.2	0.9 ± 0.2	0.50 ± 0.30
CB 3216 (1206)	3.2 ± 0.20	1.6 ± 0.2	1.1 ± 0.2	0.50 ± 0.30
CB 4516 (1806)	4.5 ± 0.20	1.6 ± 0.2	1.6 ± 0.2	0.50 ± 0.30

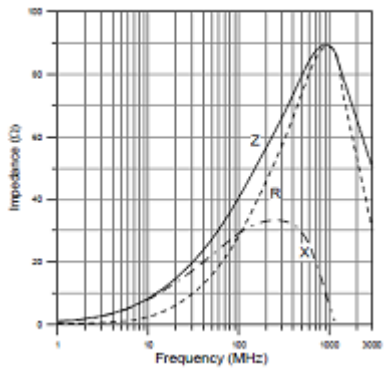
SMD MULTILAYER FERRITE CHIP BEADS / CB TYPE

ELECTRICAL CHARACTERISTICS

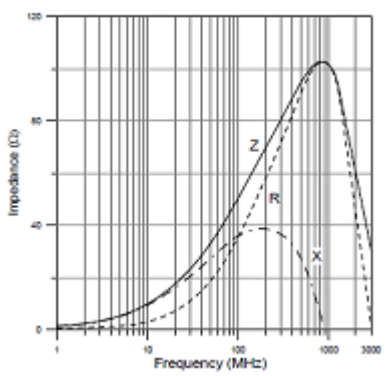
Part No.	Impedance (Ω) At 100MHz	DCR (Ω) Max	IDC (mA) Max	Part No.	Impedance (Ω) At 100MHz	DCR (Ω) Max	IDC (mA) Max
CB 0603-400 □-N	40	0.30	300	CB 2012-110 □-N	11	0.15	600
CB 0603-500 □-N	50	0.30	300	CB 2012-320 □-N	32	0.15	400
CB 0603-600 □-N	60	0.35	300	CB 2012-800 □-N	80	0.15	300
CB 0603-700 □-N	70	0.35	300	CB 2012-121 □-N	120	0.25	300
CB 0603-121 □-N	120	0.45	200	CB 2012-151 □-N	150	0.25	300
CB 0603-151 □-N	150	0.50	200	CB 2012-221 □-N	220	0.30	200
CB 0603-221 □-N	220	0.75	200	CB 2012-301 □-N	300	0.30	200
CB 0603-301 □-N	300	0.90	150	CB 2012-501 □-N	500	0.30	200
CB 1005-300 □-N	30	0.30	500	CB 2012-601 □-N	600	0.35	200
CB 1005-600 □-N	60	0.40	200	CB 2012-102 □-N	1000	0.45	200
CB 1005-121 □-N	120	0.50	200	CB 3216-310 □-N	31	0.20	500
CB 1005-221 □-N	220	0.70	100	CB 3216-600 □-N	60	0.30	400
CB 1005-301 □-N	300	0.80	100	CB 3216-900 □-N	90	0.30	300
CB 1005-451 □-N	450	0.90	100	CB 3216-151 □-N	150	0.30	300
CB 1005-601 □-N	600	1.00	100	CB 3216-301 □-N	300	0.30	300
CB 1005-102 □-N	1000	1.50	50	CB 3216-601 □-N	600	0.30	200
CB 1608-090 □-N	9	0.20	500	CB 3216-122 □-N	1200 (at 50 MHz)	0.50	100
CB 1608-300 □-N	30	0.20	400	CB 3216-152 □-N	1500 (at 50 MHz)	0.50	100
CB 1608-600 □-N	60	0.20	300	CB 3216-202 □-N	2000 (at 30 MHz)	0.60	100
CB 1608-800 □-N	80	0.20	300	CB 4516-600 □-N	60	0.10	500
CB 1608-121 □-N	120	0.20	200	CB 4516-151 □-N	150	0.30	300
CB 1608-221 □-N	220	0.20	200				
CB 1608-301 □-N	300	0.35	200				
CB 1608-451 □-N	450	0.40	200				
CB 1608-601 □-N	600	0.45	200				
CB 1608-102 □-N	1000	0.60	100				

SMD MULTILAYER FERRITE CHIP BEADS / CB TYPE

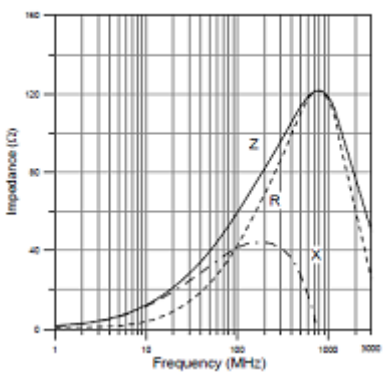
CB0603-400Y-N



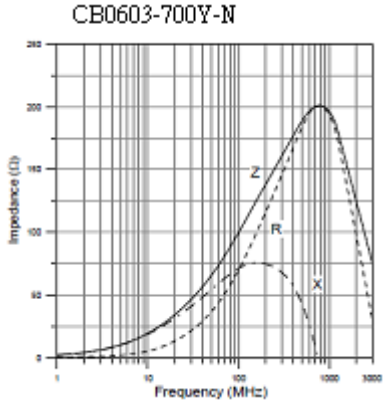
CB0603-500Y-N



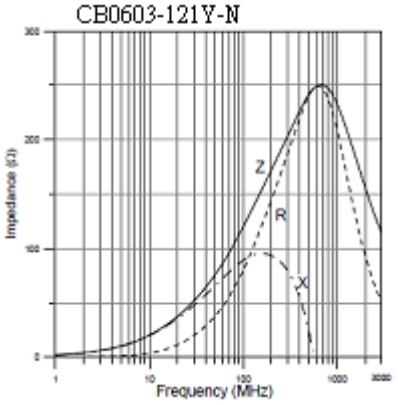
CB0603-600Y-N



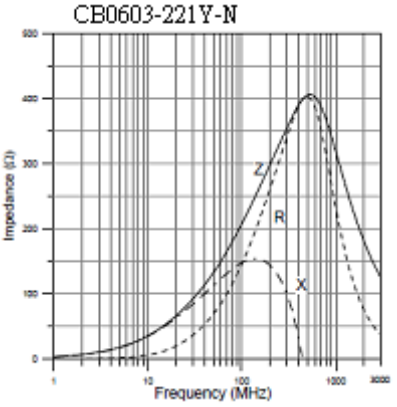
CB0603-700Y-N



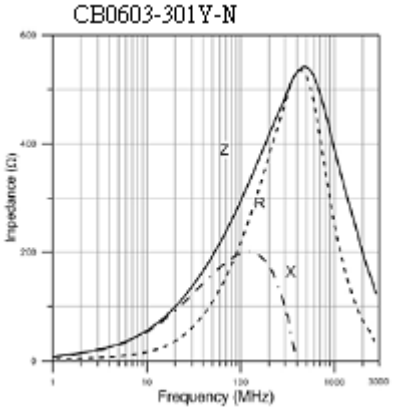
CB0603-121Y-N



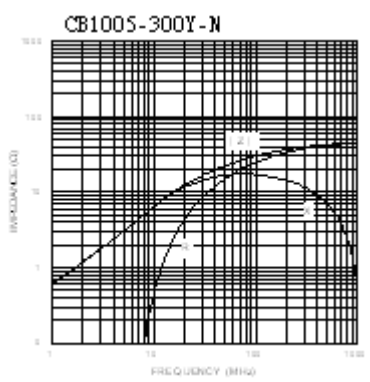
CB0603-221Y-N



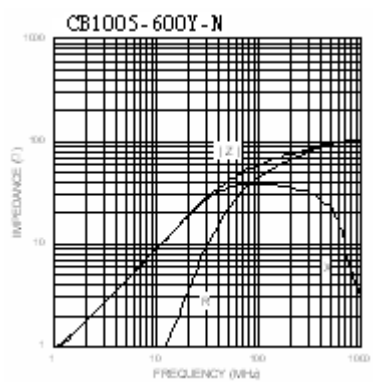
CB0603-301Y-N



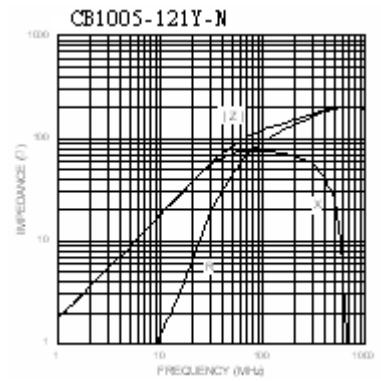
CB1005-300Y-N



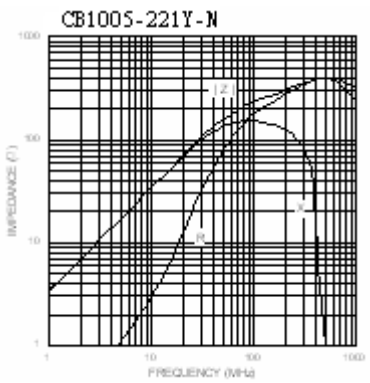
CB1005-600Y-N



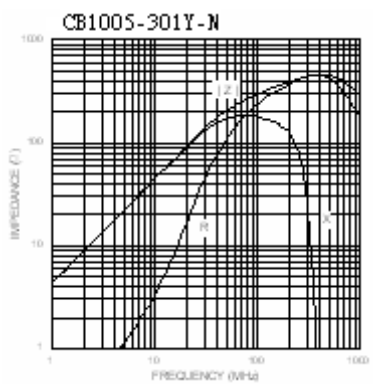
CB1005-121Y-N



CB1005-221Y-N

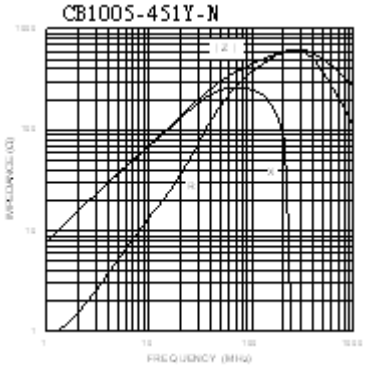


CB1005-301Y-N

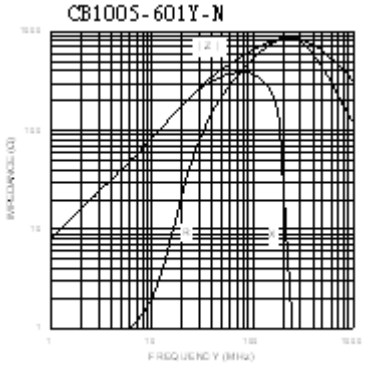


SMD MULTILAYER FERRITE CHIP BEADS / CB TYPE

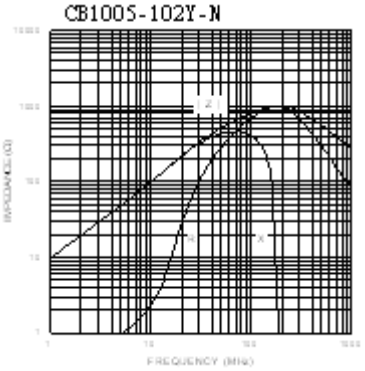
CB1005-451Y-N



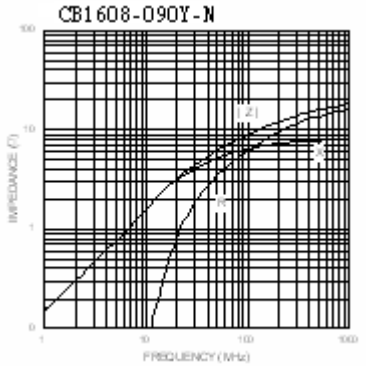
CB1005-601Y-N



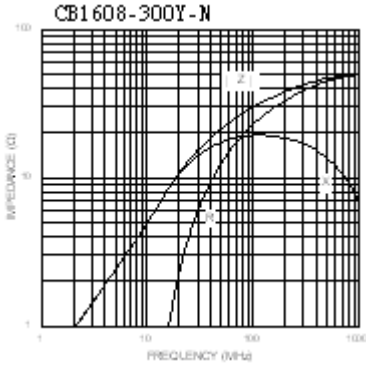
CB1005-102Y-N



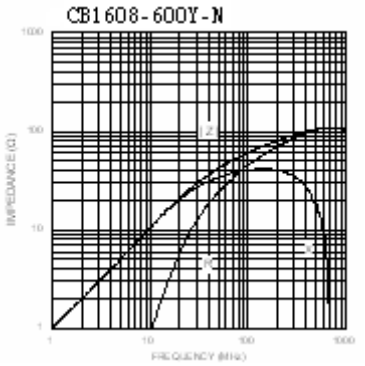
CB1608-090Y-N



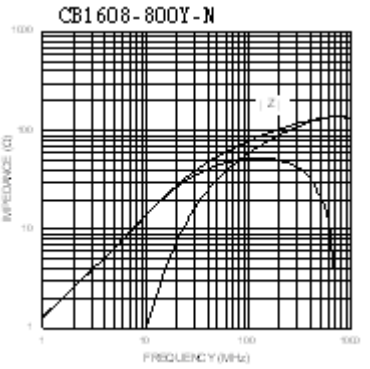
CB1608-300Y-N



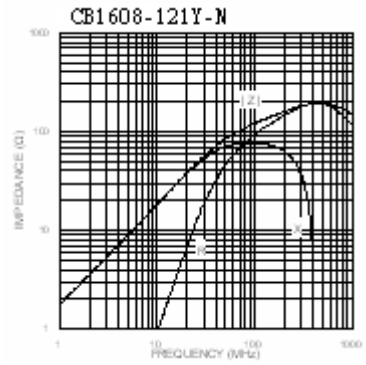
CB1608-600Y-N



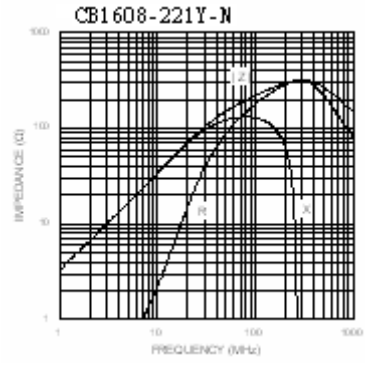
CB1608-800Y-N



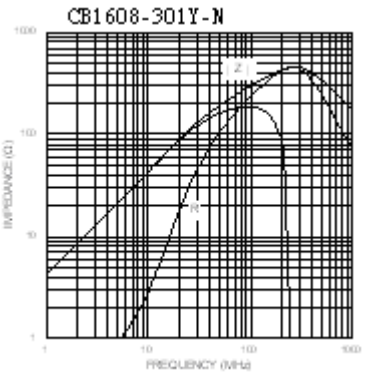
CB1608-121Y-N



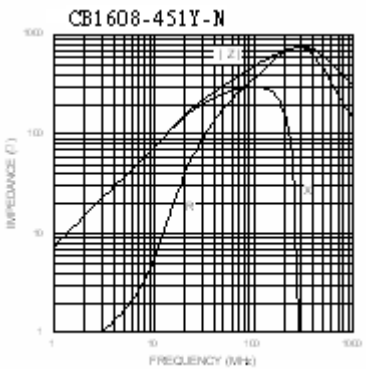
CB1608-221Y-N



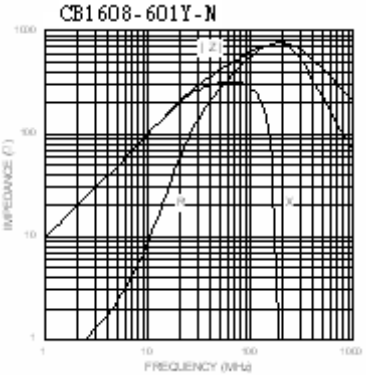
CB1608-301Y-N



CB1608-451Y-N

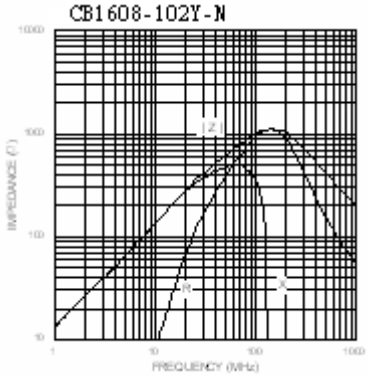


CB1608-601Y-N

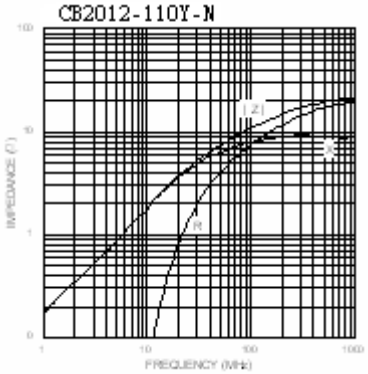


SMD MULTILAYER FERRITE CHIP BEADS / CB TYPE

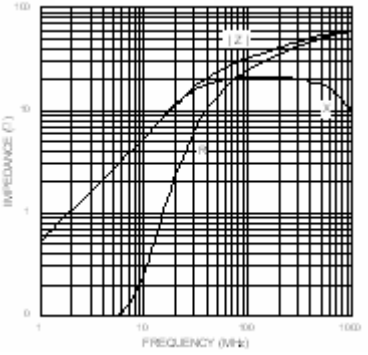
CB1608-102Y-N



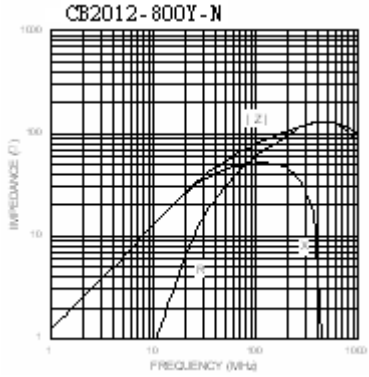
CB2012-110Y-N



CB2012-320Y-N



CB2012-800Y-N



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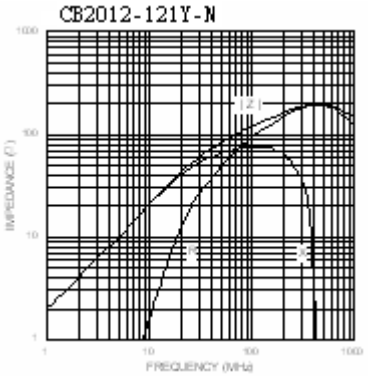
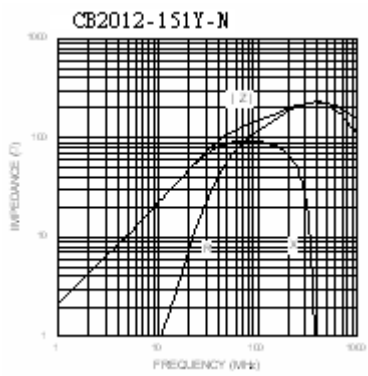
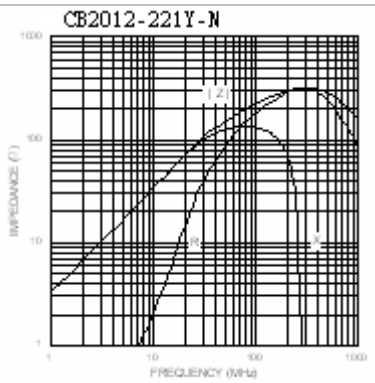


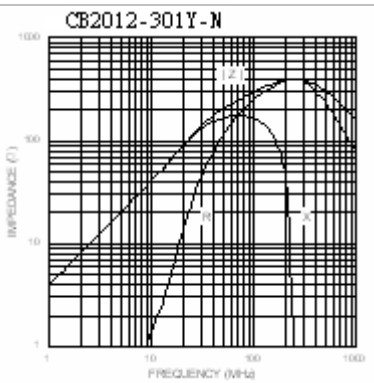
CB2012-151Y-N



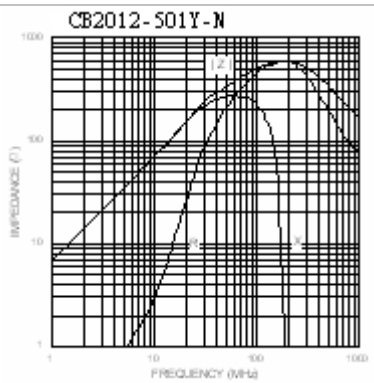
CB2012-221Y-N



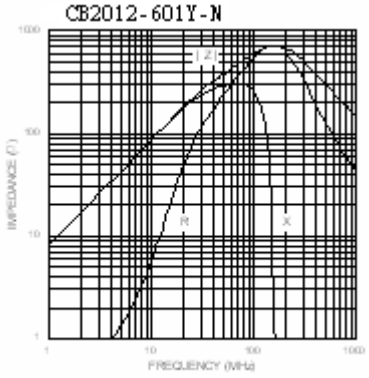
CB2012-301Y-N



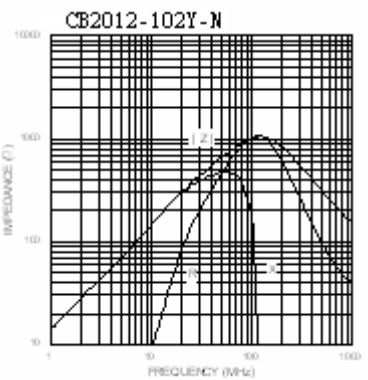
CB2012-501Y-N



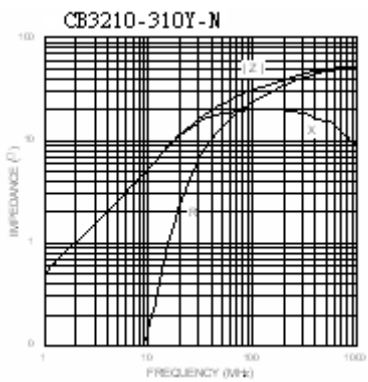
CB2012-601Y-N



CB2012-102Y-N

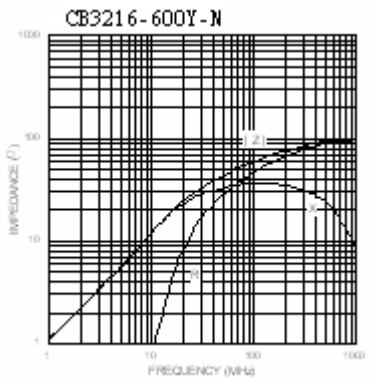


CB3210-310Y-N

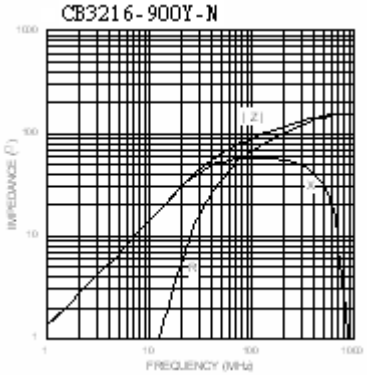


SMD MULTILAYER FERRITE CHIP BEADS / CB TYPE

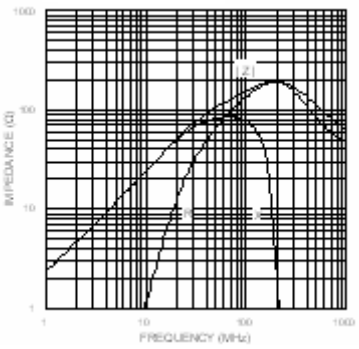
CB3216-600Y-N



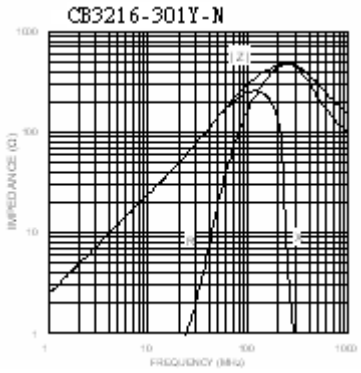
CB3216-900Y-N



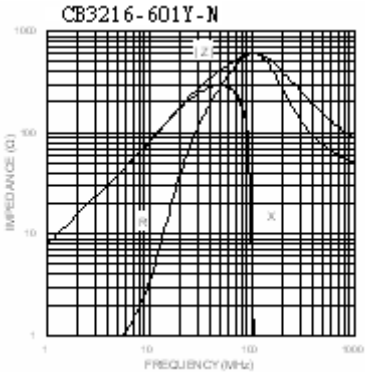
CB3216-151Y-N



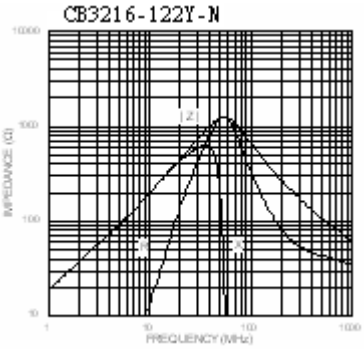
CB3216-301Y-N



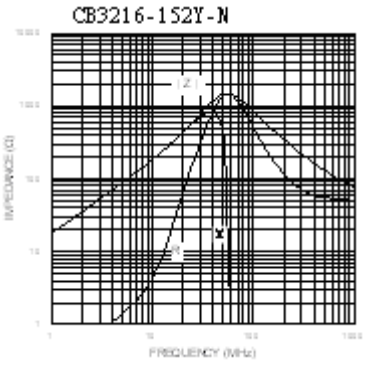
CB3216-601Y-N



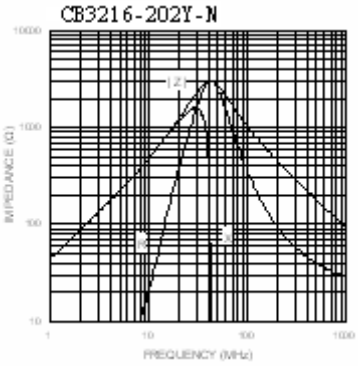
CB3216-122Y-N



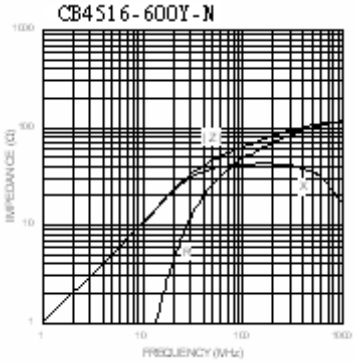
CB3216-152Y-N



CB3216-202Y-N



CB4516-600Y-N



CB4516-151Y-N