August 2017

RoHS+Halogen Compliant
ecoparts

EMC Chip Components

(Inductor, Bead & CMF)

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RoHS Compliance and restriction of Br

The following restricted materials are not used in packaging materials as well as products in compliance with the law and restriction.
- Cd, Pb, Hg, Cr6+, As, Br and the compounds, PCB, asbestos

No use of materials breaking Ozone layer

The following ODS materials are not used in our fabrication process.
- ODS material : Freon, Haron, 1 - 1 - 1 TCE, CCl4, HCFC

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http://www.semlcr.com

In order to move to the contents directly, please click each content icon

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Product Guide

Metal Composite Power Inductor

Type	Series	Size mm(inch)	Inductance Range(μH) (0.1 / 0.24 / 0.47 / 1.0 / 2.2 / 4.7 / 10)
Thin Film Metal	CIGT201608LM	2016(0806)	0.24~1.0μH
	CIGT201610LM	2016(0806)	0.24~2.2μH
	CIGT252007LM	2520(1008)	1.0~3.3μH
	CIGT252008LM	2520(1008)	0.24~2.2μH
	CIGT252010LM	2520(1008)	0.24~2.2μH
	CIGT252012LM	2520(1008)	0.47~1.0μH
	CIGT201610LH	2016(0806)	0.24~2.2μH
	CIGT252008LH	2520(1008)	0.47μH
	CIGT201610UM	2016(0806)	0.24~2.2μH
	CIGT201210UH	2012(0805)	0.24~2.2μH
	CIGT201208EM	2012(0805)	0.47~1.0μH
	CIGT201210EM	2012(0805)	1.0μH
	CIGT201608EM	2016(0806)	1.0~2.2μH
	CIGT1608R6EH	1608(0603)	1.0μH
	CIGT201206EH	2012(0805)	1.0μH
	CIGT201208EH	2012(0805)	0.47~1.0μH
	CIGT201608EH	2016(0806)	0.47~1.0μH
	CIGT201610EH	2016(0806)	0.47~2.2μH
	CIGT252010EH	2520(1008)	1.0μH
Wire Wound Metal	CIGW252012GM	2520(1008)	1.0~6.8μH
	CIGW404012GM	4040(1616)	0.47~4.7μH
	CIGW252010GL	2520(1008)	0.33~4.7μH
	CIGW252012GL	2520(1008)	4.7μH
	CIGW201610GH	2016(0806)	0.33~4.7μH
	CIGW252010EH	2520(1008)	4.7μH

Ferrite Multilayer Power Inductor

Type	Series	Size mm (inch)	Inductance Range(μH) (0.1 0.24 0.47 1.0 2.2 4.7 10)
Low Profile	CIG10F	1608(0603)	0.47~2.2μH
Normal	CIG10W	1608(0603)	0.27~4.7μH
Low Rdc	CIG10L	1608(0603)	2.5μH
Low Profile	CIG21F	2012(0805)	0.47~2.2μH
Normal	CIG21W	2012(0805)	1.0~4.7μH
Low Rdc	CIG21L	2012(0805)	0.47~4.7μH
High Current	CIG21E	2012(0805)	0.47~2.2μH
choke	CIG21C	2012(0805)	2.2~4.7μH
Normal	CIG2MW	2016(0806)	0.47~4.7μH
High Efficiency	CIG22E	2520(1008)	0.47~4.7μH
Low Rdc	CIG22L	2520(1008)	0.47~10μH
High Current & Low Profile	CIG22H	2520(1008)	0.33~4.7μH
High Current & Low Profile	CIG22B	2520(1008)	0.27~4.7μH
Normal	CIG32W	3225(1210)	1.0μH
High Current	CIG32H	3225(1210)	2.2μH

High Frequency Inductor

Type	Series	Size mm (inch)	Inductance Range(nH) (0.2 0.6 1 10 15 18 22 27 47 100 270)
Normal	CIH02T	0402(01005)	0.4~18nH
Normal	CIH03T	0603(0201)	0.6~100nH
High Q	CIH03Q	0603(0201)	0.6~100nH
High Q & Low Rdc	CIH03U	0603(0201)	0.6~100nH
Normal	CIH05T	1005(0402)	1~100nH
High Q	CIH05Q	1005(0402)	1~270nH

Product Guide

Bead

Type	Series	Size mm (inch)	Impedance Range (Ω) at 100MHz	Effective Frequency Range (1MHz 10MHz 100MHz 1GHz 10GHz)
General Signal CIM:multilayer	CIM03U	0603(0201)	80~600	
	CIM05U	1005(0402)	10~1000	
	CIM10U	1608(0603)	80~2000	
	CIM21U	2012(0805)	80~2000	
High speed signal	CIM03J	0603(0201)	120~240	
	CIM05J	1005(0402)	30~1800	
	CIM10J	1608(0603)	30~2500	
	CIM21J	2012(0805)	26~2500	
	CIM03N	0603(0201)	30~80	
	CIM05N	1005(0402)	75~220	
	CIM10N	1608(0603)	70~240	
	CIM21N	2012(0805)	70~240	
	CIM10K	1608(0603)	1500~2500	
	CIM21K	2012(0805)	1500~2500	
	CIM05F	1005(0402)	5~220	
	CIM10F	1608(0603)	47~470	
	CIM05H	1005(0402)	80~160	
High Current	CIC02W	0402(01005)	30~120	
	CIC03P	0603(0201)	30~120	
	CIC05P	1005(0402)	30~120	
	CIC10P	1608(0603)	8~600	
	CIC21P	2012(0805)	11~600	
	CIC05J	1005(0402)	60	
	CIC10J	1608(0603)	8~600	
	CIC21J	2012(0805)	60~600	
	CIC05Y	1005(0402)	30~120	
Ultra high current	CIS10P	1608(0603)	26~600	
	CIS10J~CIS21J	1608(0603)~2012(0805)	30~120	
	CIS21P	2012(0805)	30~240	

Commonode Filter (CMF)

Type	Series	Size mm (inch)	Impedance Range (Ω) at 100MHz
General Speed	CMFP080604GN	0806(0302)	30 ~ 90
	CMFP060503GN	0605(0202)	60 ~ 90
High speed	CMFP060503HN	0605(0202)	35

Metal Composite Power Inductor

High Current Type

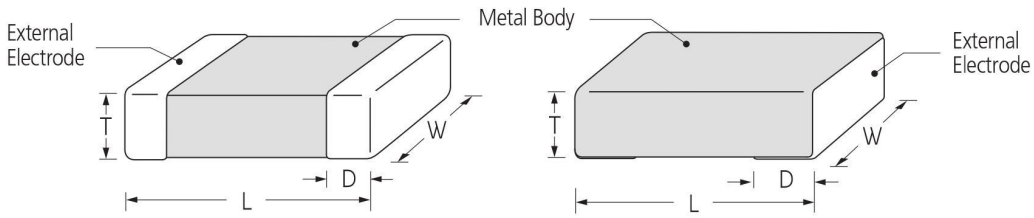
- Low DC resistance
- Magnetically shielded structure
- Free of all RoHS-regulated substances
- Monolithic structure for high reliability

Application

- Mobile phones, DSC, DVC, PDA etc. for DC- DC Converter

Operating Temp	-40~+125℃ (Including self - temperature rise)
Storage Temp (After mounting)	-40~+125℃

Dimensions



[Normal Type Termination] [L -Type Termination]

Series	Dimension (mm)			
	L	W	T	D
CIGT1608R6	1.60±0.20	0.80±0.20	0.65 max.	0.30±0.20
CIGT201206	2.00±0.20	1.25±0.20	0.60 max.	0.50±0.20
CIGT201208	2.00±0.20	1.25±0.20	0.80 max.	0.50±0.20
CIGT201210	2.00±0.20	1.25±0.20	1.00 max.	0.50±0.20
CIGT201608	2.00±0.20	1.60±0.20	0.80 max.	0.50±0.20
CIGT201610	2.00±0.20	1.60±0.20	1.00 max.	0.50±0.20
CIGT252007	2.50±0.20	2.00±0.20	0.70 max.	0.55±0.25
CIGT252008	2.50±0.20	2.00±0.20	0.80 max.	0.55±0.25
CIGT252010	2.50±0.20	2.00±0.20	1.00 max.	0.55±0.25
CIGT252012	2.50±0.20	2.00±0.20	1.20 max.	0.55±0.25
CIGW201610	2.00±0.20	1.60±0.20	1.00 max.	0.50±0.20
CIGW252010	2.50±0.20	2.00±0.20	1.00 max.	0.55±0.25
CIGW252012	2.50±0.20	2.00±0.20	1.20 max.	0.55±0.25
CIGW404012	4.10±0.20	3.80±0.20	1.20 max.	0.80±0.30

Part Numbering

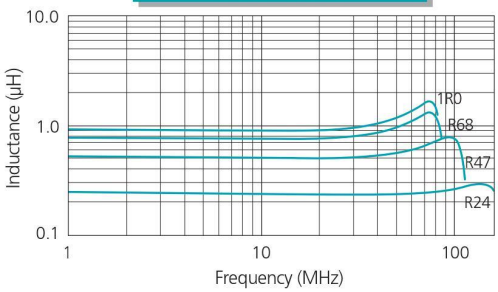
CIG	T(W)	2016	10	UM	R47	M	N	E
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

(1) Product ID (Power Inductor)
(2) Type (T : Thin film, W : Wire wound)
(3) Dimensions (2012 : 2.0mm x 1.25mm, 2016 : 2.0mm x 1.6mm, 2520 : 2.5mm x 2.0mm etc.)
(4) Max. Thickness (07 : 0.7mm, 08: 0.8mm, 10 : 1.0mm, 12 : 1.2mm etc.)
(5) Characteristic (GM : General, GL : General & Low DCR, LM : Low DCR, GH : General & Higher Isat,
UM : Ultra high efficiency, UH : Ultra high efficiency & Higher Isat,
EM : Excellent high efficiency, EH : Excellent high efficiency & Higher Isat etc.)
(6) Inductance (R47 : 0.47uH, 1R0 : 1.0uH, 2R2 : 2.2uH)
(7) Inductance Tolerance (M : ±20%, N : ±30%)
(8) Internal Code or Termination (N : Normal, L : L type)
(9) Packaging (E : Embossed tape, 7" Reel / C : Paper tape, 7" Reel)

CIGT LM Series - Low DCR

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201608LMR24MNE	0806/2016	0.8	0.24±20%	23	21	4.3	4.7	3.6	4.0
CIGT201608LMR47MNE	0806/2016	0.8	0.47±20%	41	35	3.8	4.2	2.9	3.3
CIGT201608LMR68MNE	0806/2016	0.8	0.68±20%	53	46	3.3	3.6	2.7	2.9
CIGT201608LM1R0MNE	0806/2016	0.8	1.00±20%	72	67	2.4	2.8	2.3	2.6

INDUCTANCE



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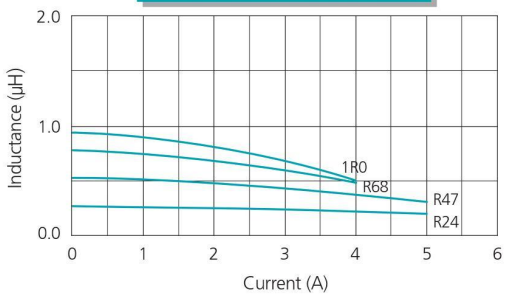
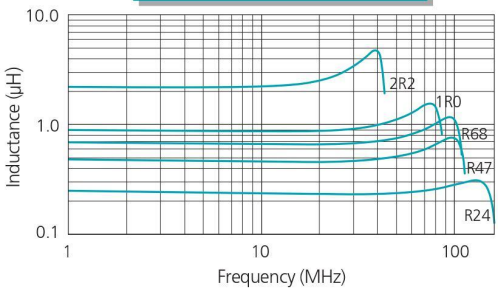


Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201610LMR24MNE	0806/2016	1.0	0.24±20%	23	20	4.6	5.3	4.0	4.3
CIGT201610LMR47MNE	0806/2016	1.0	0.47±20%	41	32	3.5	4.5	3.0	3.4
CIGT201610LMR68MNE	0806/2016	1.0	0.68±20%	53	46	3.2	3.8	2.7	2.9
CIGT201610LM1R0MNE	0806/2016	1.0	1.00±20%	72	67	2.6	3.3	2.4	2.5
CIGT201610LM2R2MNE	0806/2016	1.0	2.20±20%	154	128	1.6	1.7	1.6	1.7

INDUCTANCE



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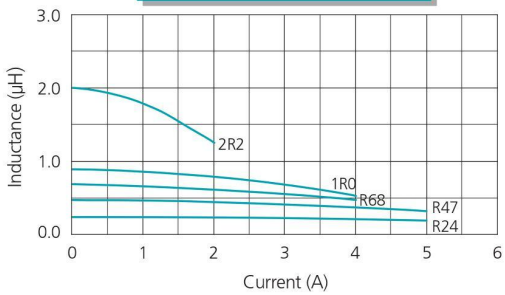
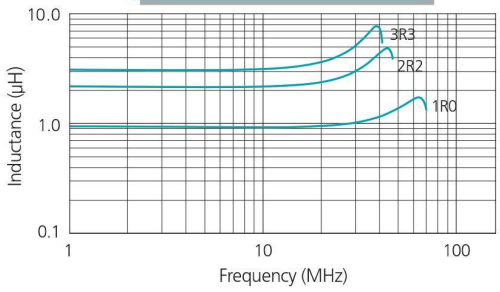


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

CIGT LM Series - Low DCR

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT252007LM1R0MNC	1008/2520	0.7	1.00±20%	60	54	3.0	3.2	2.5	2.9
CIGT252007LM2R2MNC	1008/2520	0.7	2.20±20%	140	127	1.8	2.2	1.6	1.8
CIGT252007LM3R3MNC	1008/2520	0.7	3.30±20%	291	243	1.6	1.9	1.1	1.3

INDUCTANCE



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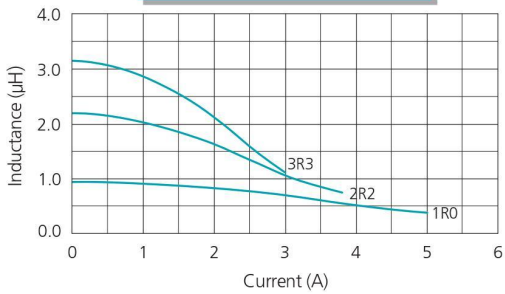
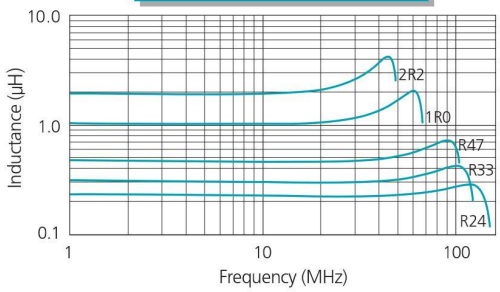


Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT252008LMR24MNE	1008/2520	0.8	0.24±20%	16	12	6.5	7.0	6.0	7.0
CIGT252008LMR33MNE	1008/2520	0.8	0.33±20%	26	20	5.0	5.8	4.3	4.7
CIGT252008LMR47MNE	1008/2520	0.8	0.47±20%	29	24	4.7	5.5	4.2	4.5
CIGT252008LM1R0MNE	1008/2520	0.8	1.00±20%	50	43	3.5	3.8	3.1	3.5
CIGT252008LM2R2MNE	1008/2520	0.8	2.20±20%	97	83	1.9	2.1	2.0	2.4

INDUCTANCE



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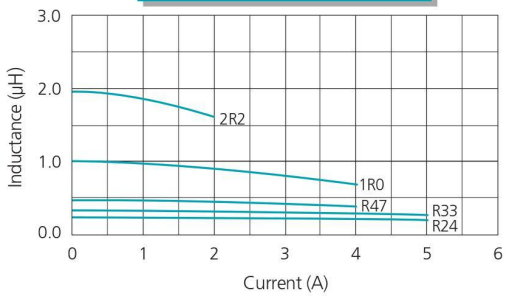
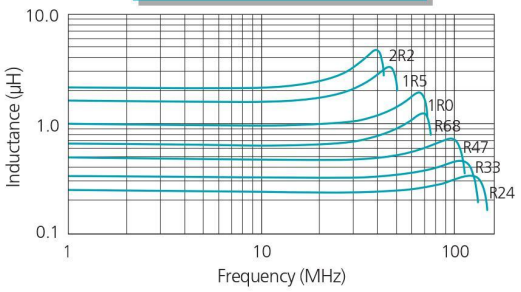


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

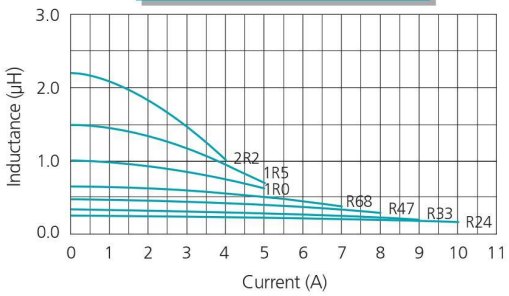
CIGT LM Series - Low DCR

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT252010LMR24MNE	1008/2520	1.0	0.24±20%	16	12	7.5	8.5	6.0	7.0
CIGT252010LMR33MNE	1008/2520	1.0	0.33±20%	22	17	6.5	7.3	5.0	5.5
CIGT252010LMR47MNE	1008/2520	1.0	0.47±20%	29	24	5.0	6.0	4.2	4.5
CIGT252010LMR68MNE	1008/2520	1.0	0.68±20%	45	35	4.0	4.5	3.3	3.7
CIGT252010LM1R0MNE	1008/2520	1.0	1.00±20%	50	43	3.8	4.2	3.1	3.5
CIGT252010LM1R5MNE	1008/2520	1.0	1.50±20%	78	65	3.0	3.5	2.6	3.0
CIGT252010LM2R2MNE	1008/2520	1.0	2.20±20%	97	81	2.3	2.8	2.1	2.5

INDUCTANCE

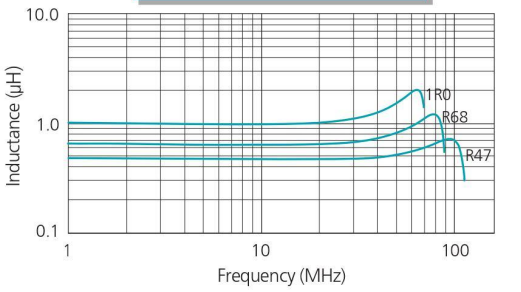


DC BIAS CHARACTERISTIC

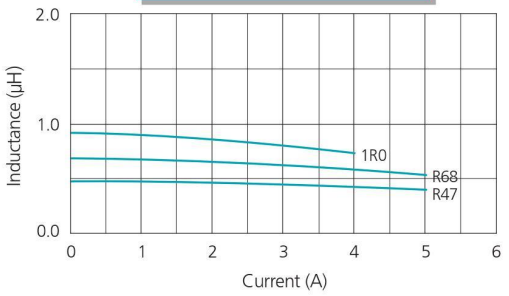


Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT252012LMR47MNE	1008/2520	1.2	0.47±20%	25	20	5.6	6.3	4.3	4.7
CIGT252012LMR68MNE	1008/2520	1.2	0.68±20%	33	28	4.0	4.7	3.56	4.0
CIGT252012LM1R0MNE	1008/2520	1.2	1.00±20%	40	34	3.8	4.5	3.4	3.8

INDUCTANCE



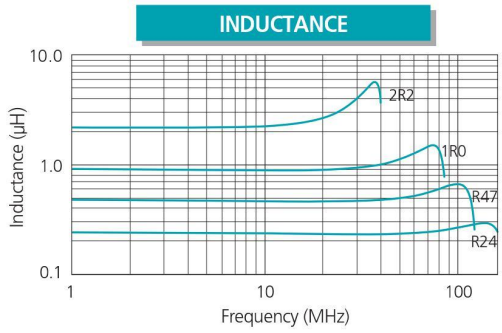
DC BIAS CHARACTERISTIC

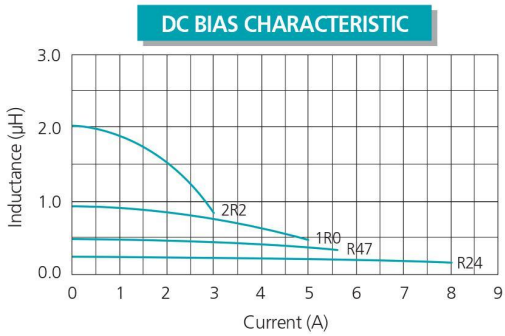


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

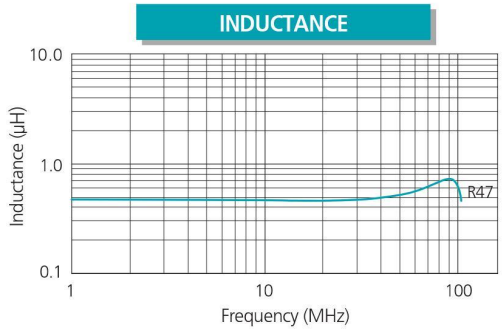
CIGT LH Series - Low DCR & Higher Isat

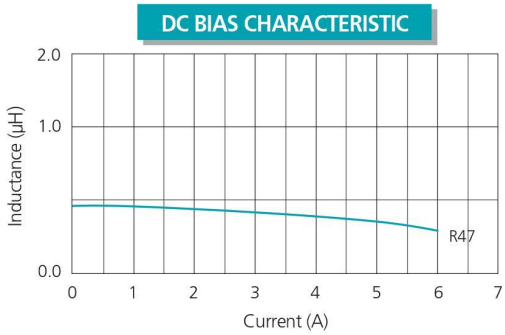
Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201610LHR24MNE	0806/2016	1.0	0.24±20%	19	15	5.9	6.5	4.7	5.5
CIGT201610LHR47MNE	0806/2016	1.0	0.47±20%	33	28	4.9	5.4	3.6	4.1
CIGT201610LH1R0MNE	0806/2016	1.0	1.00±20%	57	50	3.6	3.9	2.8	3.1
CIGT201610LH2R2MNE	0806/2016	1.0	2.20±20%	139	116	2.0	2.3	1.8	2.0





Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT252008LHR47MNE	1008/2520	0.8	0.47±20%	29	24	5.0	5.5	4.2	4.5



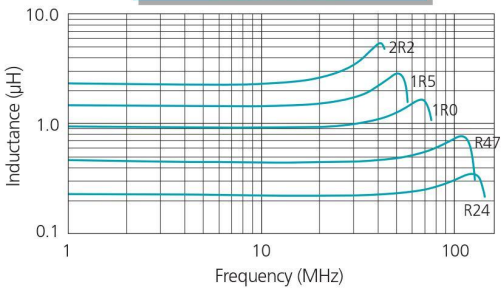


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

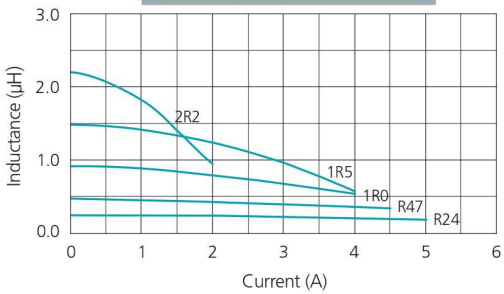
CIGT UM Series - Ultra high efficiency

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201610UMR24MNE	0806/2016	1.0	0.24±20%	21	17	5.1	6.0	4.1	4.7
CIGT201610UMR47MNE	0806/2016	1.0	0.47±20%	36	30	4.5	5.2	3.2	3.6
CIGT201610UM1R0MNE	0806/2016	1.0	1.00±20%	57	48	3.1	3.45	2.8	3.1
CIGT201610UM1R5MNE	0806/2016	1.0	1.50±20%	110	90	2.5	2.8	2.0	2.3
CIGT201610UM2R2MNE	0806/2016	1.0	2.20±20%	154	128	1.3	1.7	1.6	1.7

INDUCTANCE



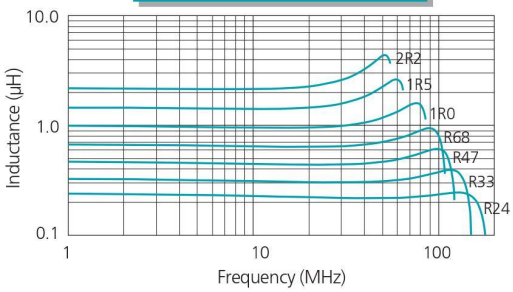
DC BIAS CHARACTERISTIC



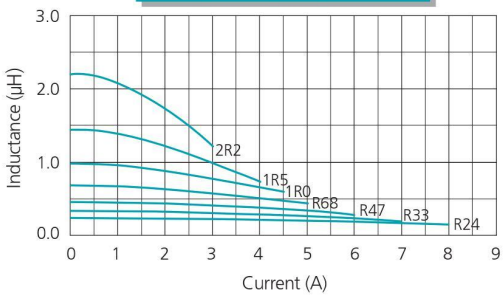
CIGT UH Series - Ultra high efficiency & Higher Isat

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201210UHR24MNE	0805/2012	1.0	0.24±20%	22	17	6.6	7.2	4.4	5.0
CIGT201210UHR33MNE	0805/2012	1.0	0.33±20%	26	21	5.4	5.9	4.0	4.5
CIGT201210UHR47MNE	0805/2012	1.0	0.47±20%	31	25	4.9	5.4	3.6	4.1
CIGT201210UHR68MNE	0805/2012	1.0	0.68±20%	47	39	4.0	4.4	3.0	3.4
CIGT201210UH1R0MNE	0805/2012	1.0	1.00±20%	71	59	3.3	3.7	2.5	2.8
CIGT201210UH1R5MNE	0805/2012	1.0	1.50±20%	97	81	2.6	2.9	2.1	2.4
CIGT201210UH2R2MNE	0805/2012	1.0	2.20±20%	140	116	2.1	2.4	1.6	1.8

INDUCTANCE



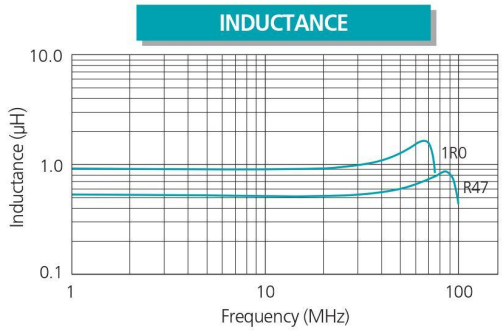
DC BIAS CHARACTERISTIC

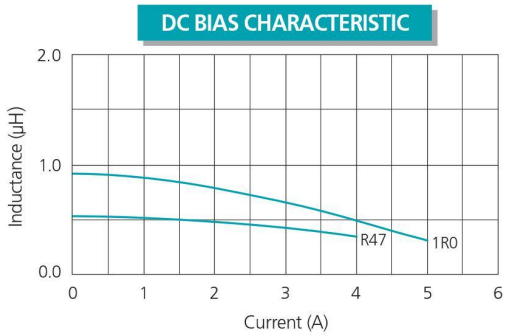


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

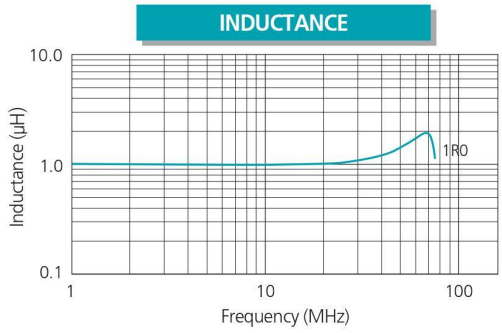
CIGT EM Series - Excellent high efficiency

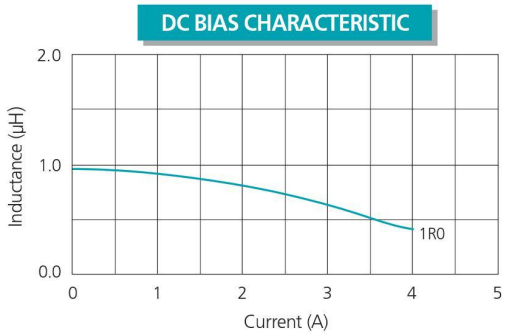
Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201208EMR47MNE	0805/2012	0.8	0.47±20%	43	37	4.0	4.2	3.0	3.2
CIGT201208EM1R0MNE	0805/2012	0.8	1.00±20%	60	50	2.5	3.0	2.5	2.9





Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201210EM1R0MNE	0805/2012	1.0	1.00±20%	60	50	2.7	2.8	2.3	2.5



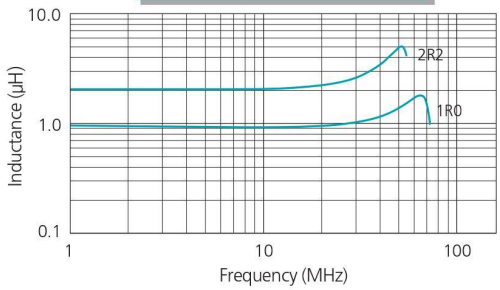


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

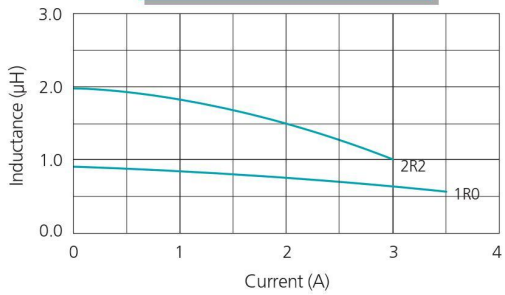
CIGT EM Series - Excellent high efficiency

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201608EM1R0MNE	0806/2016	0.8	1.00±20%	57	53	3.1	3.5	2.7	3.0
CIGT201608EM2R2MNE	0806/2016	0.8	2.20±20%	110	92	1.9	2.2	2.0	2.4

INDUCTANCE



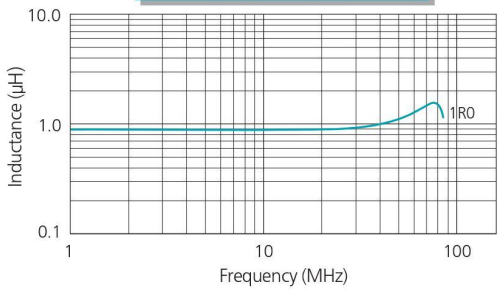
DC BIAS CHARACTERISTIC



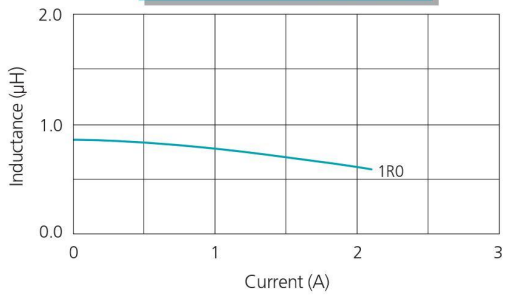
CIGT EH Series - Excellent high efficiency & Higher Isat

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT1608R6EH1R0MNC	0603/1608	0.65	1.00±20%	160	135	1.7	2.0	1.5	1.7

INDUCTANCE



DC BIAS CHARACTERISTIC

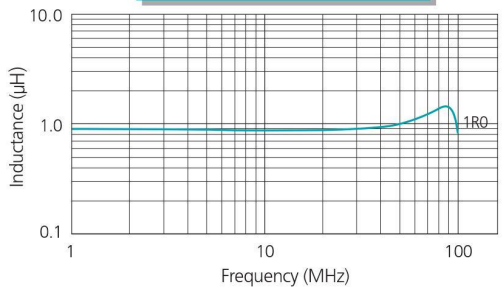


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

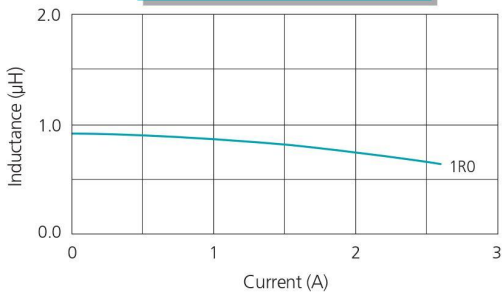
CIGT EH Series - Excellent high efficiency & Higher Isat

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201206EH1R0MNE	0805/2012	0.6	1.00±20%	110	90	2.4	2.7	1.8	2.0

INDUCTANCE

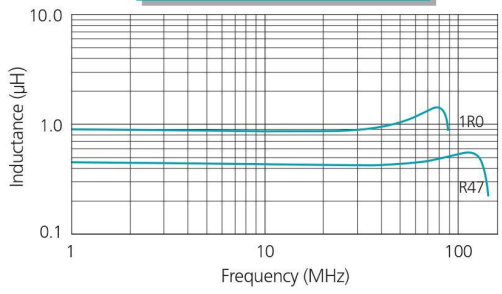


DC BIAS CHARACTERISTIC

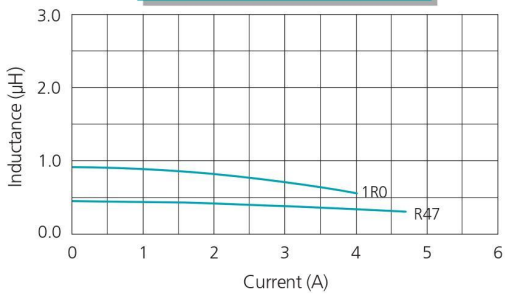


Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201208EHR47MNE	0805/2012	0.8	0.47±20%	35	31	4.1	4.3	3.7	3.9
CIGT201208EH1R0MNE	0805/2012	0.8	1.00±20%	55	48	3.2	3.5	3.1	3.3

INDUCTANCE



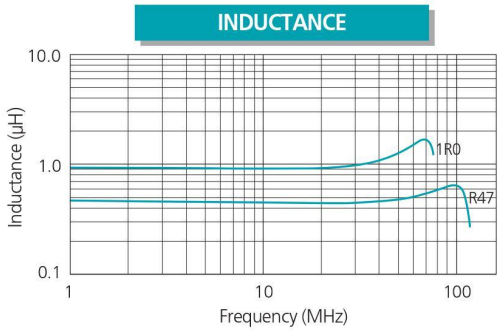
DC BIAS CHARACTERISTIC

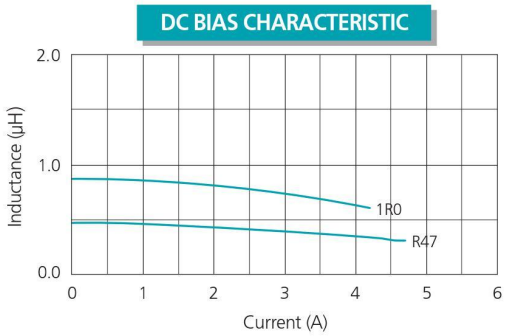


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

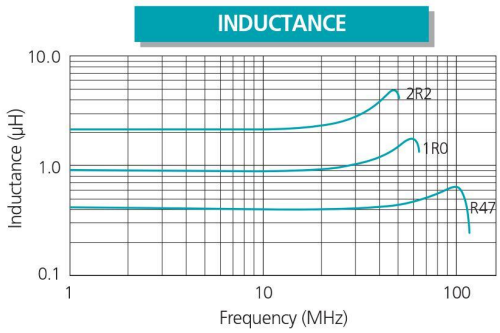
CIGT EH Series - Excellent high efficiency & Higher Isat

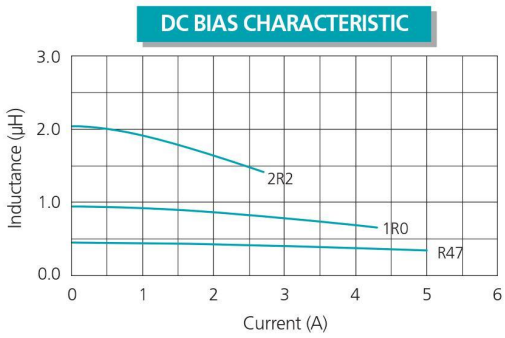
Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201608EHR47MNE	0806/2016	0.8	0.47±20%	27	24	4.3	4.6	4.3	4.5
CIGT201608EH1R0MNE	0806/2016	0.8	1.00±20%	48	41	4.0	4.3	3.6	3.8





Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT201610EHR47MNE	0806/2016	1.0	0.47±20%	22	18	5.5	5.9	4.8	5.0
CIGT201610EH1R0MNE	0806/2016	1.0	1.00±20%	43	38	4.2	4.5	4.1	4.3
CIGT201610EH2R2MNE	0806/2016	1.0	2.20±20%	87	73	2.7	2.9	2.5	2.7



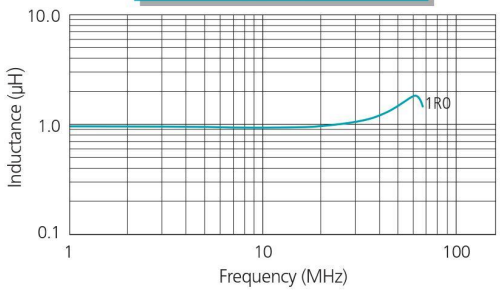


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

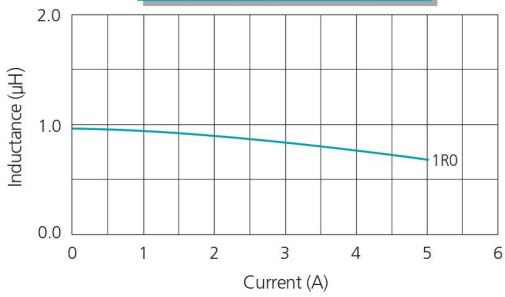
CIGT EH Series - Excellent high efficiency & Higher Isat

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGT252010EH1R0MNE	1008/2520	1.0	1.00±20%	30	26	4.7	5.0	4.1	4.3

INDUCTANCE



DC BIAS CHARACTERISTIC

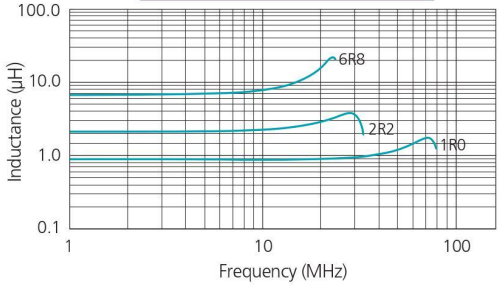


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

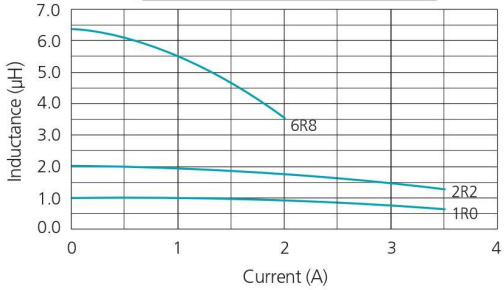
CIGW GM Series - General

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGW252012GM1R0MNE	1008/2520	1.2	1.00±20%	46	37	3.8	4.4	3.4	3.7
CIGW252012GM2R2MNE	1008/2520	1.2	2.20±20%	99	84	2.6	3.1	2.1	2.4
CIGW252012GM6R8MNE	1008/2520	1.2	6.80±20%	300	250	1.5	1.7	1.3	1.5

INDUCTANCE

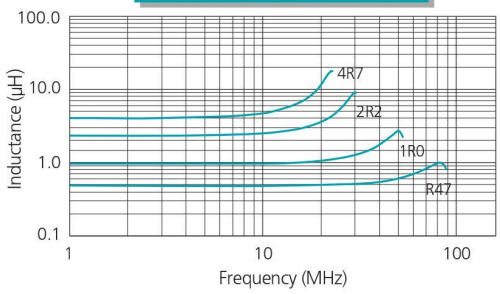


DC BIAS CHARACTERISTIC



Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGW404012GMR47MLE	1616/4040	1.2	0.47±20%	17	13	9.0	9.4	6.0	6.5
CIGW404012GM1R0MLE	1616/4040	1.2	1.00±20%	25	21	6.2	6.5	5.1	5.4
CIGW404012GM2R2MLE	1616/4040	1.2	2.20±20%	57	48	4.7	5.2	3.1	3.4
CIGW404012GM4R7MLE	1616/4040	1.2	4.70±20%	96	80	2.9	3.4	2.0	2.4

INDUCTANCE



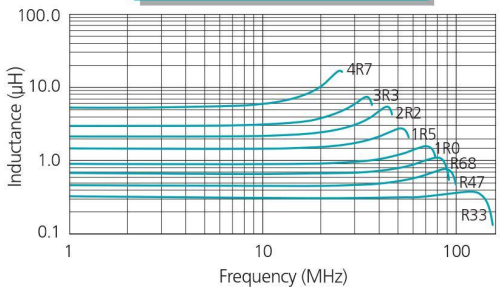
DC BIAS CHARACTERISTIC

※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

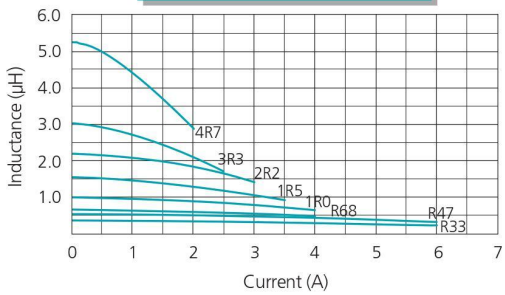
CIGW GL Series - Low DCR

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGW252010GLR33MNE	1008/2520	1.0	0.33±20%	16	12	5.5	6.2	6.2	6.5
CIGW252010GLR47MNE	1008/2520	1.0	0.47±20%	20	15	5.1	5.5	5.9	6.3
CIGW252010GLR68MNE	1008/2520	1.0	0.68±20%	29	23	3.9	4.2	5.2	5.5
CIGW252010GL1R0MNE	1008/2520	1.0	1.00±20%	40	34	3.3	3.7	3.3	3.5
CIGW252010GL1R5MNE	1008/2520	1.0	1.50±20%	54	45	2.8	3.1	3.2	3.4
CIGW252010GL2R2MNE	1008/2520	1.0	2.20±20%	93	78	2.1	2.6	2.2	2.5
CIGW252010GL3R3MNE	1008/2520	1.0	3.30±20%	112	94	1.8	2.1	1.8	2.1
CIGW252010GL4R7MNE	1008/2520	1.0	4.70±20%	216	180	1.4	1.7	1.4	1.6

INDUCTANCE

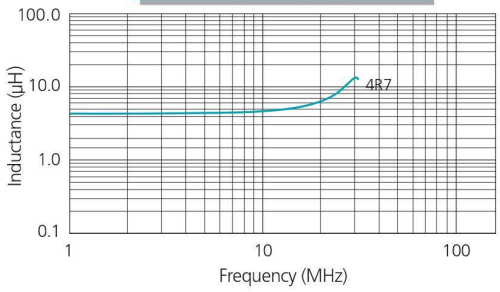


DC BIAS CHARACTERISTIC

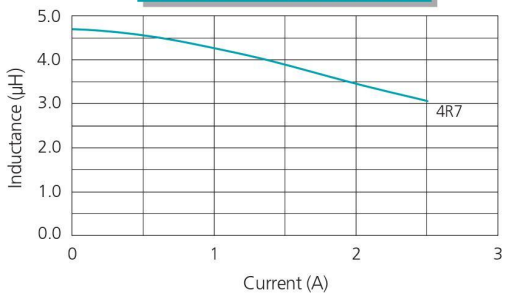


Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGW252012GL4R7MNE	1008/2520	1.2	4.70±20%	210	175	1.7	2.2	1.4	1.7

INDUCTANCE



DC BIAS CHARACTERISTIC

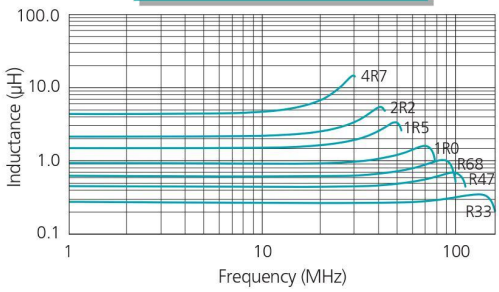


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

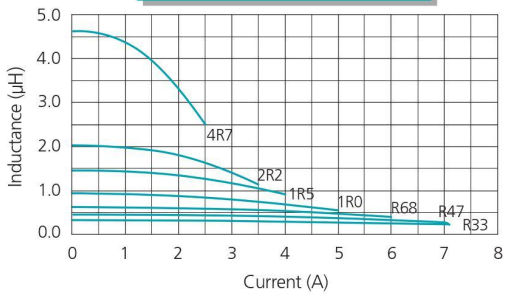
CIGW GH Series - General & Higher Isat

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGW201610GHR33MLE	0806/2016	1.0	0.33±20%	23	18	5.5	6.2	4.0	4.5
CIGW201610GHR47MLE	0806/2016	1.0	0.47±20%	32	26	5.1	5.5	3.6	4.2
CIGW201610GHR68MLE	0806/2016	1.0	0.68±20%	39	32	4.8	5.1	3.2	3.6
CIGW201610GH1R0MLE	0806/2016	1.0	1.00±20%	54	46	3.8	4.2	2.7	3.1
CIGW201610GH1R5MLE	0806/2016	1.0	1.50±20%	85	72	3.1	3.5	2.1	2.4
CIGW201610GH2R2MLE	0806/2016	1.0	2.20±20%	117	100	2.6	2.8	1.8	2.0
CIGW201610GH4R7MLE	0806/2016	1.0	4.70±20%	279	237	1.8	2.0	1.1	1.3

INDUCTANCE



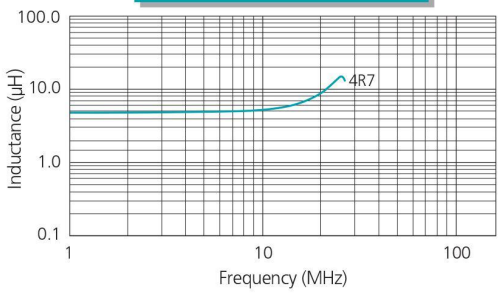
DC BIAS CHARACTERISTIC



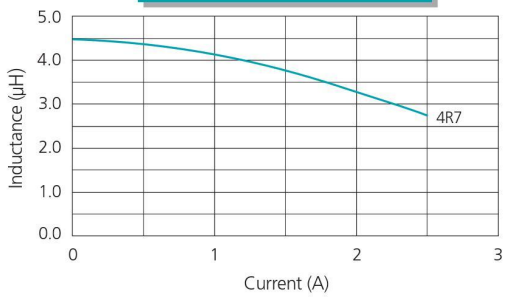
CIGW EH Series - Excellent high efficiency & Higher Isat

Part No.	Size (inch/mm)	Thickness Max.(mm)	Inductance (μH) @1MHz	DC Resistance (mΩ)		Rated Current Idc1(A) ΔL=30%		Rated Current Idc2(A) ΔT=40℃	
				Max.	Typ.	Max.	Typ.	Max.	Typ.
CIGW252010EH4R7MNE	1008/2520	1.0	4.70±20%	150	130	1.9	2.2	1.4	1.6

INDUCTANCE



DC BIAS CHARACTERISTIC



※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature: -40~125℃ (Including self-temperature rise)
※Measuring instrument
- Inductance, Idc1 : Agilent E4991A, DC Resistance : Agilent 4338A/B

General Features

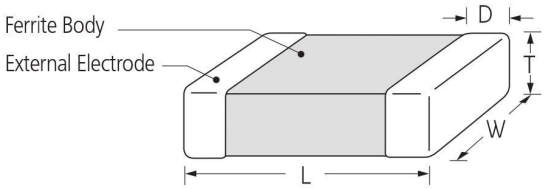
- Low profile (1.0mm max height)
- Magnetically shielded and Low DC resistance
- Lead free termination and internal electrode
- Monolithic structure for high reliability

Application

- Mobile phones, DSC, DVC, PDA etc. for DC-DC Converter

Operating Temp	-40~+125℃ (Including self - temperature rise)
Storage Temp (After mounting)	-40~+125℃

Dimensions



Series	Dimension (mm)			
	L	W	T	D
CIG10F	1.60±0.15	0.80±0.15	0.50 max.	0.30±0.20
CIG10W	1.60±0.15	0.80±0.15	0.80±0.15	0.30±0.20
CIG10L	1.60±0.10	0.80±0.10	0.65±0.10	0.50+0.20/-0.30
CIG21F	2.00±0.10	1.25±0.10	0.50 max.	0.50+0.20/-0.30
CIG21W	2.00±0.20	1.25±0.20	0.90±0.10	0.50+0.20/-0.30
CIG21L	2.00±0.10	1.25±0.10	0.90±0.10	0.50+0.20/-0.30
CIG21C	2.00±0.10	1.25±0.10	0.90±0.10	0.50+0.20/-0.30
CIG21E	2.00±0.20	1.25±0.15	0.90±0.10	0.50+0.20/-0.30
CIG2MW	2.00±0.15	1.60±0.15	0.90±0.10	0.50±0.20
CIG22L	2.50±0.20	2.00±0.20	0.90±0.10	0.55±0.25
CIG22H	2.50±0.20	2.00±0.20	0.90±0.10	0.55±0.25
	2.50±0.20	2.00±0.20	1.10±0.10	0.55±0.25
CIG22E	2.50±0.20	2.00±0.20	0.90±0.10	0.55±0.25
CIG22B	2.50±0.15	2.00±0.15	0.90±0.10	0.60±0.20
	2.50±0.20	2.00±0.20	0.70±0.10	0.55±0.25
	2.50±0.20	2.00±0.20	0.90±0.10	0.55±0.25
CIG32W	3.20±0.20	2.50±0.20	0.90±0.10	0.50±0.30
CIG32H	3.20±0.15	2.50±0.15	1.10±0.10	0.50±0.30

Part Numbering

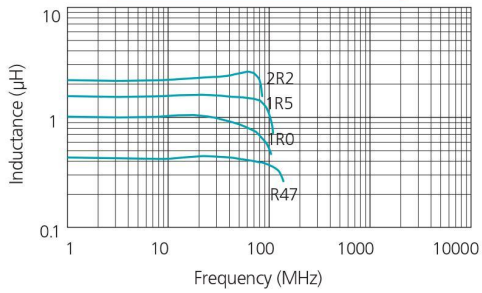
CI	G	22	L	4R7	M	N	E
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

(1) Product ID (Chip inductor)
(2) Type (Power Inductor)
(3) Dimensions (10 : 1.6mm x 0.8mm, 21 : 2.0mm x 1.25mm, 2M : 2.0mm x 1.6mm, etc.)
(4) Product Series (W : Normal Type, L : Low Rdc Type, F : Low profile Type, C : Choke Type,
H : High Current Type, B: High Current & Low Profile Type),
E : High Current Type (2012 size), High Efficiency Type (2520 size)
(5) Inductance (R47 : 0.47uH, 2R2 : 2.2uH, 4R7 : 4.7uH)
(6) Tolerance (M : ±20%, N : ±30%)
(7) Thickness Option (N : Standard, A : Thinner than standard, B : Thicker than standard)
(8) Packaging (C : Paper tape / 7"reel, E : Embossed tape / 7"reel)

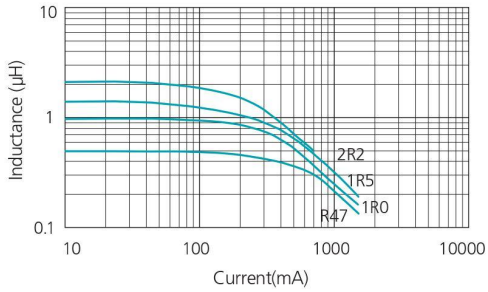
CIG10F Series - Low Profile

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG10FR47MNC	0603/1608	0.50 max.	0.47±20%	0.20±30%	0.62	0.80
CIG10F1R0MNC	0603/1608	0.50 max.	1.00±20%	0.30±30%	0.33	0.70
CIG10F1R5MNC	0603/1608	0.50 max.	1.50±20%	0.35±30%	0.24	0.60
CIG10F2R2MNC	0603/1608	0.50 max.	2.20±20%	0.45±30%	0.19	0.50

INDUCTANCE



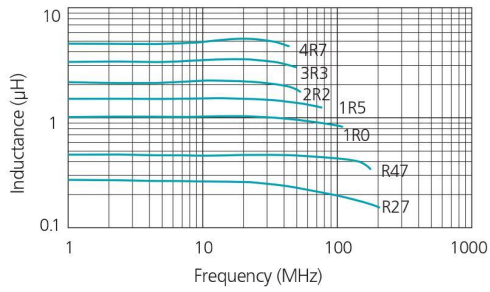
DC BIAS CHARACTERISTIC



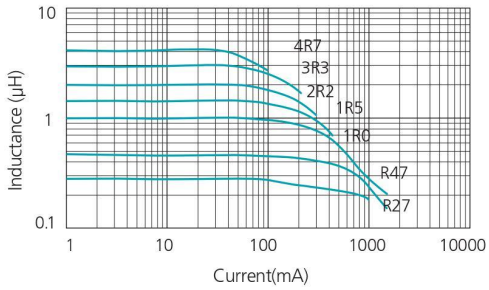
CIG10W Series - Normal

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG10WR27MNC	0603/1608	0.80±0.15	0.27±25%	0.12±25%	1.00	1.30
CIG10WR47MNC	0603/1608	0.80±0.15	0.47±20%	0.15±20%	0.70	1.10
CIG10W1R0MNC	0603/1608	0.80±0.15	1.00±20%	0.20±20%	0.35	0.95
CIG10W1R5MNC	0603/1608	0.80±0.15	1.50±20%	0.25±20%	0.27	0.80
CIG10W2R2MNC	0603/1608	0.80±0.15	2.20±20%	0.30±20%	0.17	0.75
CIG10W3R3MNC	0603/1608	0.80±0.15	3.30±20%	0.40±20%	0.13	0.70
CIG10W4R7MNC	0603/1608	0.80±0.15	4.70±20%	0.50±20%	0.07	0.62

INDUCTANCE



DC BIAS CHARACTERISTIC

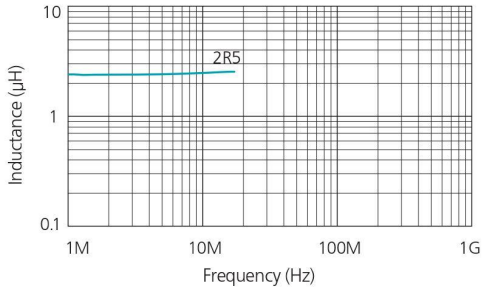


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent

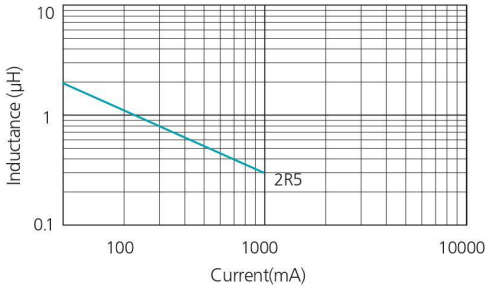
CIG10L Series - Low Rdc

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG10L2R5NAC	0603/1608	0.65±0.10	2.50±30%	0.24±25%	0.60	0.70

INDUCTANCE(Typ.)



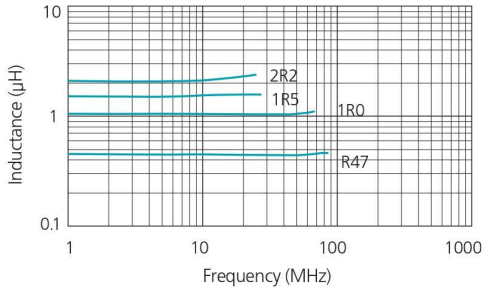
DC BIAS CHARACTERISTIC(Typ.)



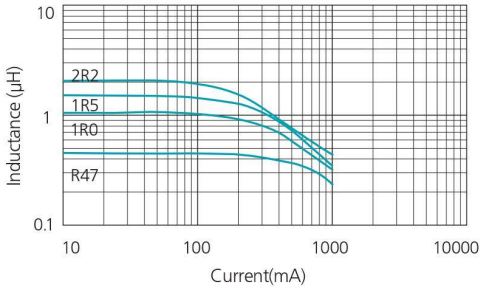
CIG21F Series - Low Profile

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG21FR47MNC	0805/2012	0.50 max.	0.47±20%	0.12±25%	0.80	1.10
CIG21F1R0MNC	0805/2012	0.50 max.	1.00±20%	0.19±25%	0.39	0.80
CIG21F1R5MNC	0805/2012	0.50 max.	1.50±20%	0.25±25%	0.32	0.70
CIG21F2R2MNC	0805/2012	0.50 max.	2.20±20%	0.34±25%	0.25	0.60

INDUCTANCE(Typ.)



DC BIAS CHARACTERISTIC(Typ.)

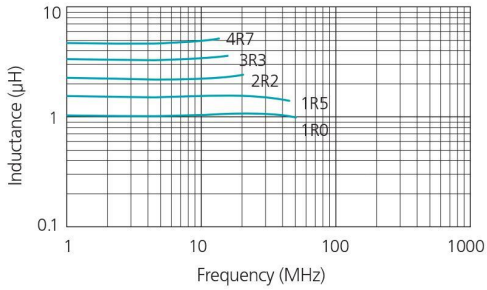


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent

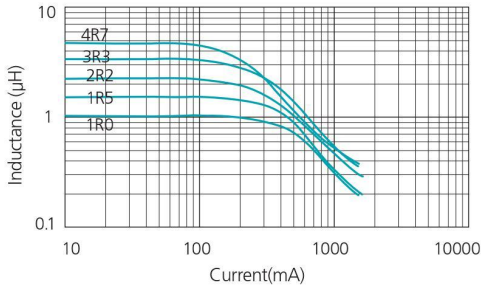
CIG21W Series - Normal

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG21W1R0MNE	0805/2012	0.90±0.10	1.00±25%	0.133±20%	0.60	1.05
CIG21W1R5MNE	0805/2012	0.90±0.10	1.50±25%	0.150±20%	0.43	0.96
CIG21W2R2MNE	0805/2012	0.90±0.10	2.20±20%	0.200±20%	0.34	0.81
CIG21W3R3MNE	0805/2012	0.90±0.10	3.30±20%	0.250±20%	0.29	0.73
CIG21W4R7MNE	0805/2012	0.90±0.10	4.70±20%	0.300±20%	0.14	0.65

INDUCTANCE(Typ.)



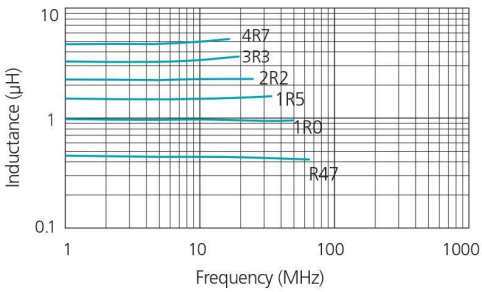
DC BIAS CHARACTERISTIC(Typ.)



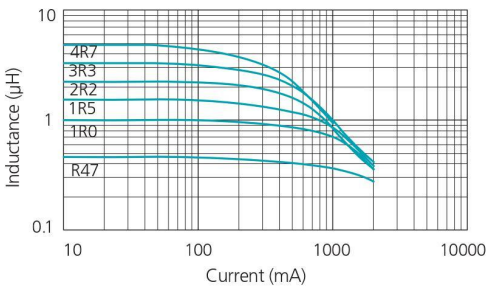
CIG21L Series - Low Rdc

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG21LR47MNE	0805/2012	0.90±0.10	0.47±20%	0.080±20%	1.50	1.30
CIG21L1R0MNE	0805/2012	0.90±0.10	1.00±20%	0.110±20%	1.00	1.15
CIG21L1R2MNE	0805/2012	0.90±0.10	1.20±20%	0.125±20%	0.85	1.10
CIG21L1R5MNE	0805/2012	0.90±0.10	1.50±20%	0.140±20%	0.78	1.05
CIG21L2R2MNE	0805/2012	0.90±0.10	2.20±20%	0.160±20%	0.47	0.95
CIG21L3R3MNE	0805/2012	0.90±0.10	3.30±20%	0.220±20%	0.42	0.80
CIG21L4R7MNE	0805/2012	0.90±0.10	4.70±20%	0.260±20%	0.27	0.75

INDUCTANCE(Typ.)



DC BIAS CHARACTERISTIC(Typ.)

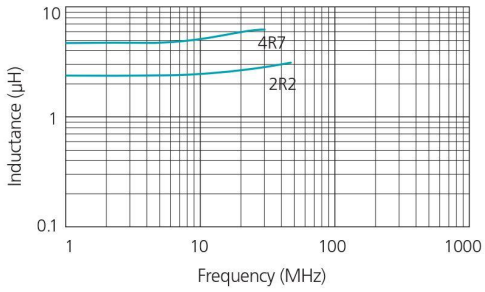


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent

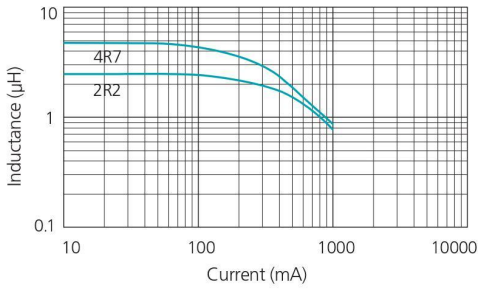
CIG21C Series - Choke

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG21C2R2MNE	0805/2012	0.90±0.10	2.20±20%	0.250±20%	0.50	0.80
CIG21C4R7MNE	0805/2012	0.90±0.10	4.70±20%	0.433±20%	0.25	0.58

INDUCTANCE(Typ.)



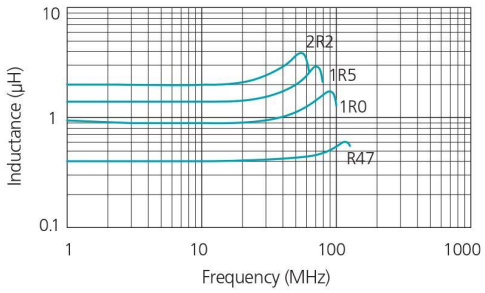
DC BIAS CHARACTERISTIC(Typ.)



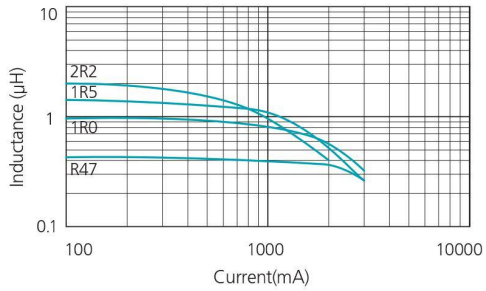
CIG21E Series - High Current

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG21ER47MNE	0805/2012	0.90±0.10	0.47±20%	0.040±30%	2.50	2.48
CIG21E1R0MNE	0805/2012	0.90±0.10	1.00±20%	0.080±25%	1.50	1.70
CIG21E1R5MNE	0805/2012	0.90±0.10	1.50±20%	0.125±25%	1.10	1.30
CIG21E2R2MNE	0805/2012	0.90±0.10	2.20±20%	0.125±25%	0.70	1.30

INDUCTANCE(Typ.)



DC BIAS CHARACTERISTIC(Typ.)

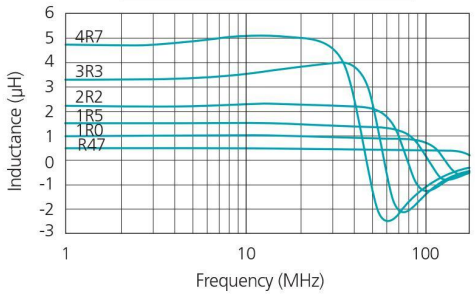


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent

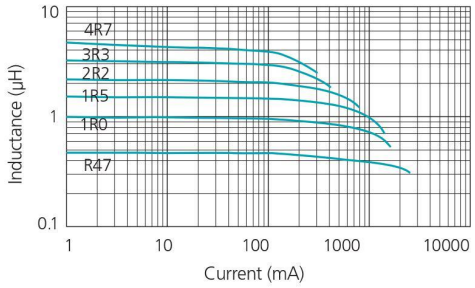
CIG2MW Series - Normal

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG2MWR47NNE	0806/2016	0.90±0.10	0.47±30%	0.060±25%	1.50	1.60
CIG2MW1R0NNE	0806/2016	0.90±0.10	1.00±30%	0.085±25%	1.00	1.40
CIG2MW1R5NNE	0806/2016	0.90±0.10	1.50±30%	0.110±25%	0.83	1.20
CIG2MW2R2NNE	0806/2016	0.90±0.10	2.20±30%	0.110±25%	0.52	1.20
CIG2MW3R3NNE	0806/2016	0.90±0.10	3.30±30%	0.120±25%	0.28	1.20
CIG2MW4R7NNE	0806/2016	0.90±0.10	4.70±30%	0.140±25%	0.18	1.10

INDUCTANCE(Typ.)



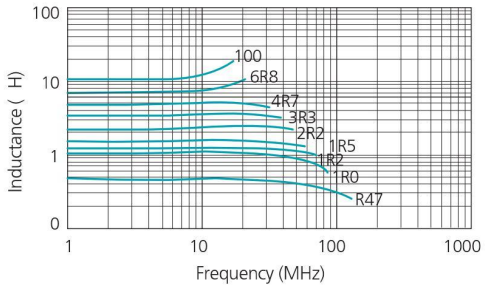
DC BIAS CHARACTERISTIC(Typ.)



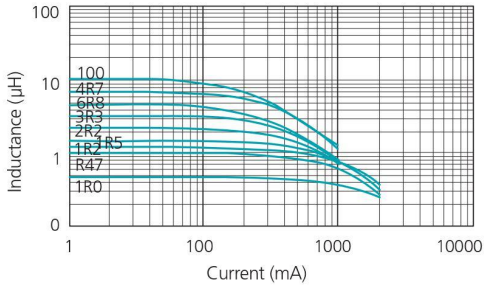
CIG22L Series - Low Rdc

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG22LR47MNE	1008/2520	0.90±0.10	0.47±20%	0.040±25%	1.35	1.80
CIG22L1R0MNE	1008/2520	0.90±0.10	1.00±20%	0.060±25%	0.75	1.60
CIG22L1R2MNE	1008/2520	0.90±0.10	1.20±20%	0.065±25%	0.85	1.50
CIG22L1R5MNE	1008/2520	0.90±0.10	1.50±20%	0.070±25%	0.65	1.50
CIG22L2R2MNE	1008/2520	0.90±0.10	2.20±20%	0.080±25%	0.45	1.30
CIG22L3R3MNE	1008/2520	0.90±0.10	3.30±20%	0.100±25%	0.32	1.20
CIG22L4R7MNE	1008/2520	0.90±0.10	4.70±20%	0.110±25%	0.25	1.10
CIG22L6R8MNE	1008/2520	0.90±0.10	6.80±20%	0.203±30%	0.22	0.80
CIG22L100MNE	1008/2520	0.90±0.10	100±20%	0.323±30%	0.17	0.60

INDUCTANCE(Typ.)



DC BIAS CHARACTERISTIC(Typ.)

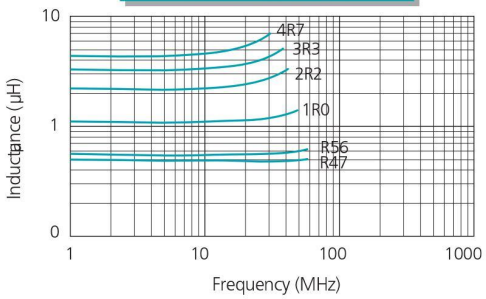


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent

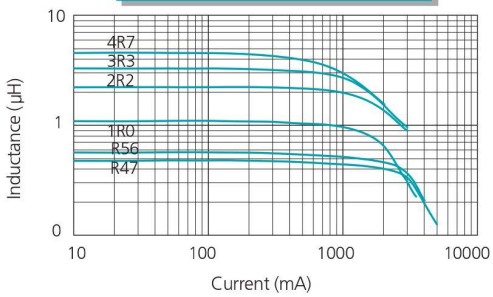
CIG22B Series - High Current & Low Profile

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG22BR47MAE	1008/2520	0.70±0.10	0.47±20%	0.08±25%	3.00	1.60
CIG22BR56MAE	1008/2520	0.70±0.10	0.56±20%	0.10±25%	2.80	1.40
CIG22B1R0MAE	1008/2520	0.70±0.10	1.00±20%	0.11±25%	1.70	1.30
CIG22B2R2MAE	1008/2520	0.70±0.10	2.20±20%	0.19±25%	0.85	1.10
CIG22B3R3MAE	1008/2520	0.70±0.10	3.30±20%	0.22±25%	0.65	1.00
CIG22B4R7MAE	1008/2520	0.70±0.10	4.70±20%	0.28±25%	0.45	0.80

INDUCTANCE(Typ.)



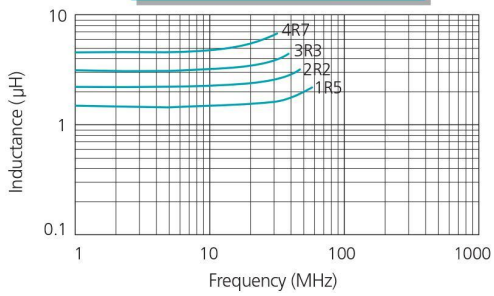
DC BIAS CHARACTERISTIC(Typ.)



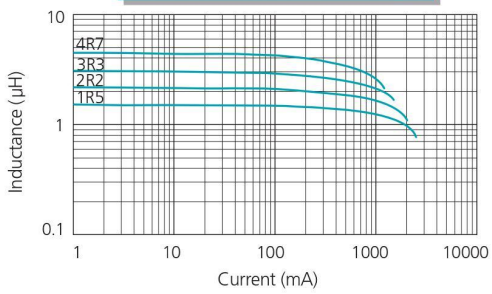
CIG22B Series- High Current & Low Profile(LGA Type)

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG22B1R5MLE	1008/2520	0.90±0.10	1.50±20%	0.150±25%	1.60	1.00
CIG22B2R2MLE	1008/2520	0.90±0.10	2.20±20%	0.170±25%	1.30	0.90
CIG22B3R3MLE	1008/2520	0.90±0.10	3.30±20%	0.220±25%	0.90	0.80
CIG22B4R7MLE	1008/2520	0.90±0.10	4.70±20%	0.260±25%	0.70	0.70

INDUCTANCE(Typ.)



DC BIAS CHARACTERISTIC(Typ.)

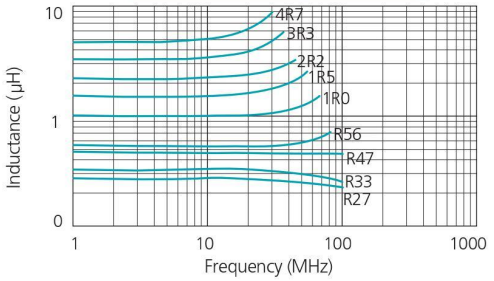


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent

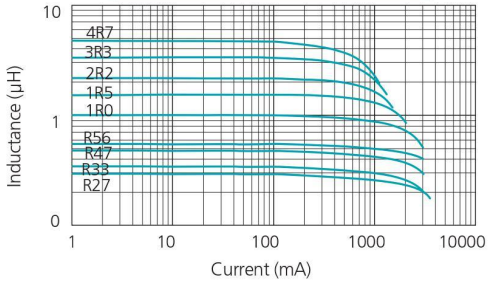
CIG22B Series- High Current

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG22BR27MNE	1008/2520	0.90±0.10	0.27±20%	0.047±30%	2.80	1.80
CIG22BR33MNE	1008/2520	0.90±0.10	0.33±20%	0.047±30%	2.40	1.70
CIG22BR47MNE	1008/2520	0.90±0.10	0.47±20%	0.0655±30%	2.40	1.60
CIG22BR56MNE	1008/2520	0.90±0.10	0.56±20%	0.090±30%	2.70	1.30
CIG22B1R0MNE	1008/2520	0.90±0.10	1.00±20%	0.125±20%	2.00	1.20
CIG22B1R5MNE	1008/2520	0.90±0.10	1.50±20%	0.148±20%	1.70	1.15
CIG22B2R2MNE	1008/2520	0.90±0.10	2.20±20%	0.183±20%	1.20	1.10
CIG22B3R3MNE	1008/2520	0.90±0.10	3.30±20%	0.216±20%	0.96	1.05
CIG22B4R7MNE	1008/2520	0.90±0.10	4.70±20%	0.250±20%	0.65	1.00

INDUCTANCE(Typ.)



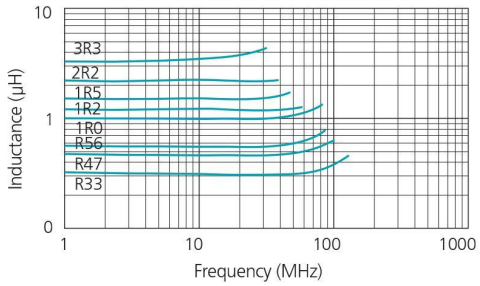
DC BIAS CHARACTERISTIC(Typ.)



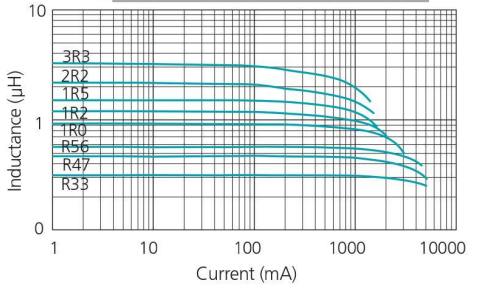
CIG22H Series - High Current & Low Profile

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG22HR33MAE	1008/2520	0.90±0.10	0.33±20%	0.044±30%	4.80	2.20
CIG22HR47MAE	1008/2520	0.90±0.10	0.47±20%	0.044±30%	3.80	2.10
CIG22HR56MAE	1008/2520	0.90±0.10	0.56±20%	0.055±30%	3.50	2.00
CIG22H1R0MAE	1008/2520	0.90±0.10	1.00±20%	0.065±20%	2.00	1.80
CIG22H1R2MAE	1008/2520	0.90±0.10	1.20±20%	0.065±20%	1.60	1.70
CIG22H1R5MAE	1008/2520	0.90±0.10	1.50±20%	0.074±20%	1.30	1.50
CIG22H2R2MAE	1008/2520	0.90±0.10	2.20±20%	0.138±20%	1.10	1.20
CIG22H3R3MAE	1008/2520	0.90±0.10	3.30±20%	0.138±20%	0.85	1.10

INDUCTANCE(Typ.)



DC BIAS CHARACTERISTIC(Typ.)

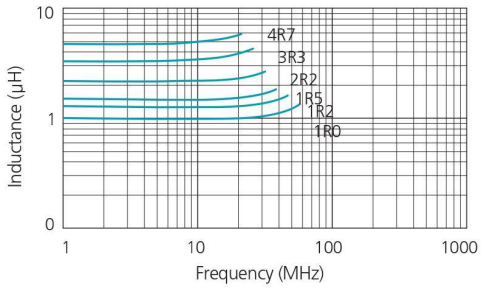


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent

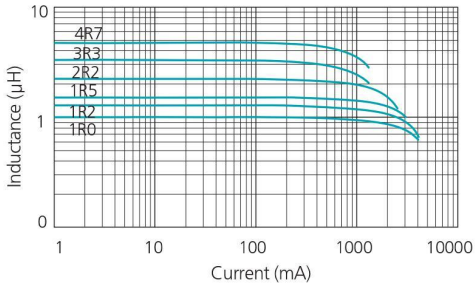
CIG22H Series - High Current

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG22H1R0MNE	1008/2520	1.10±0.10	1.00±20%	0.080±25%	3.30	1.50
CIG22H1R2MNE	1008/2520	1.10±0.10	1.20±20%	0.094±20%	2.80	1.50
CIG22H1R5MNE	1008/2520	1.10±0.10	1.50±20%	0.104±20%	2.40	1.50
CIG22H2R2MNE	1008/2520	1.10±0.10	2.20±20%	0.116±20%	1.80	1.20
CIG22H3R3MNE	1008/2520	1.10±0.10	3.30±20%	0.133±20%	1.00	1.00
CIG22H4R7MNE	1008/2520	1.10±0.10	4.70±20%	0.233±20%	0.95	0.80

INDUCTANCE(Typ.)



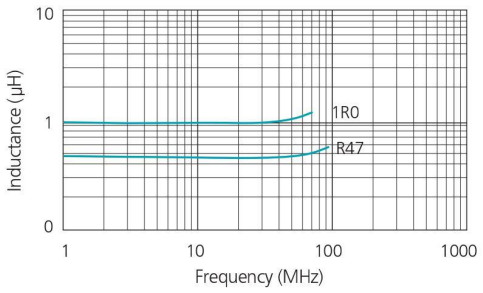
DC BIAS CHARACTERISTIC(Typ.)



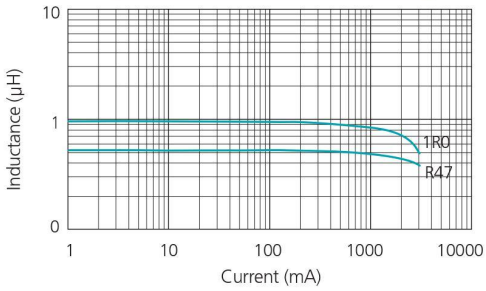
CIG22E Series - High Efficiency & Low Profile

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG22ER47MNE	1008/2520	0.90±0.10	0.47±20%	0.036±30%	3.20	3.20
CIG22E1R0MNE	1008/2520	0.90±0.10	1.00±20%	0.048±30%	2.20	2.30
CIG22E1R5MNE	1008/2520	0.90±0.10	1.50±20%	0.130±20%	2.40	1.50
CIG22E2R2MNE	1008/2520	0.90±0.10	2.20±20%	0.150±20%	1.70	1.30
CIG22E3R3MNE	1008/2520	0.90±0.10	3.30±20%	0.200±20%	1.10	1.10
CIG22E4R7MNE	1008/2520	0.90±0.10	4.70±20%	0.265±20%	0.90	1.00

INDUCTANCE(Typ.)



DC BIAS CHARACTERISTIC(Typ.)

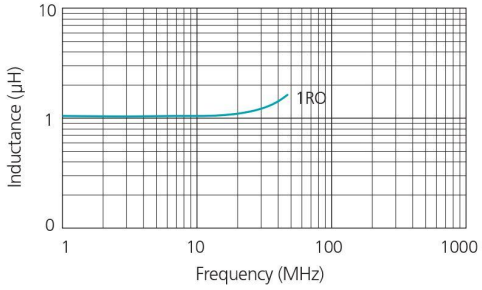


※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent

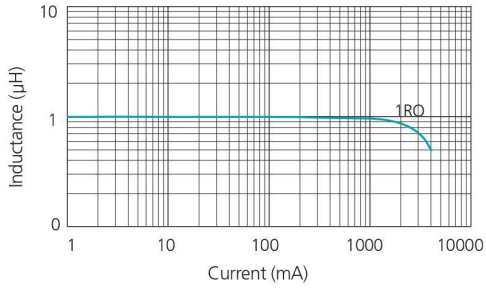
CIG32W Series -Normal

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG32W1R0MNE	1210/3225	0.90±0.10	1.00±20%	0.06±25%	2.70	1.50

INDUCTANCE(Typ.)



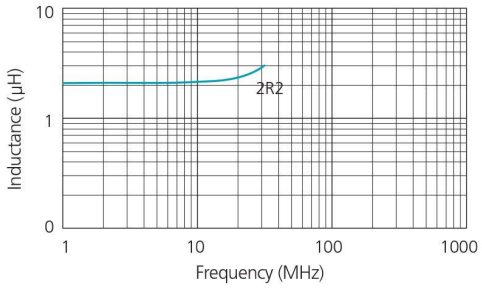
DC BIAS CHARACTERISTIC(Typ.)



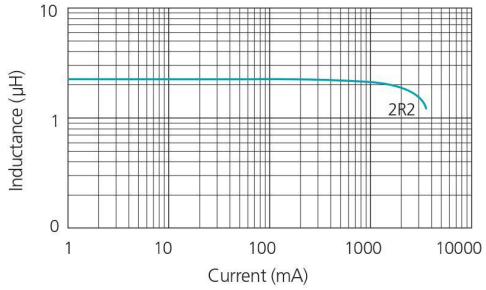
CIG32H Series -High Current

Part No.	Size (inch/mm)	Thickness (mm)	Inductance (μH) @1MHz	DC Resistance (Ω)	Rated Current Idc1(A) ΔL=30%	Rated Current Idc2(A) ΔT=40℃
					Typ.	Max.
CIG32H2R2MNE	1210/3225	1.10±0.10	2.20±20%	0.06±25%	2.90	1.60

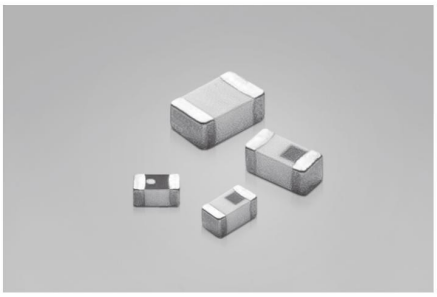
INDUCTANCE(Typ.)



DC BIAS CHARACTERISTIC(Typ.)



※Rated Current Idc1 (A) : DC current value when inductance drops by 30% of inductance value.
※Rated Current Idc2 (A) : DC current value when the temperature of inductor rises to 40℃ by self heating
(Reference ambient temperature: 25℃)
※Operating temperature : -40~125℃ (Including self-temperature rise)
※Measuring instrument : E4991A+16092A or Equivalent



Feature

- Lowest value of specific resistance, good property of Q and high SRF.
- Possible to use at range above 100MHz
- Monolithic structure for high reliability.

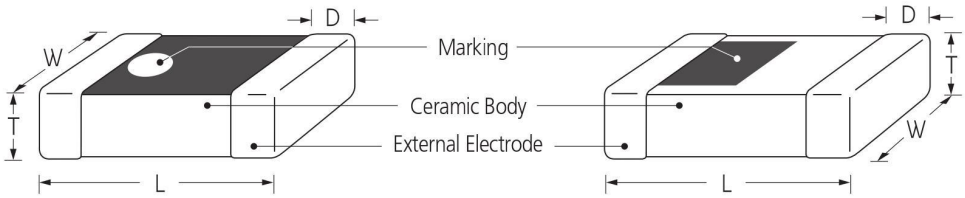
Application

- Mobile communication systems, noise suppression at high frequency and Impedance matching.

CIH Series has dielectric material and 100% Ag as an internal conductor. Therefore, it has high Q and |Z| at high frequency. It is possible to use for high frequency over 100MHz.

Operating Temp	-55~+125℃
Storage Temp (After mounting)	-55~+125℃

Dimensions



[CIH02 Type] [Normal Type]

Series	Dimension (mm)			
	L	W	T	D
CIH02T	0.40±0.02	0.20±0.02	0.20±0.02	0.10±0.03
CIH03T	0.60±0.03	0.30±0.03	0.30±0.03	0.15±0.05
CIH03Q/CIH03U	0.60±0.03	0.30±0.03	0.30±0.03	0.10±0.05
CIH05T	0.50±0.05	0.50±0.05	0.50±0.05	0.25±0.10

Part Numbering

CI	H	03	T	12N	J	N	C
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

(1) Product ID (Chip Inductor)
(2) Type (High frequency type)
(3) Dimension (02 : 0.4mm x 0.2mm, 03 : 0.6mm x 0.3mm, 05 : 1.0mm x 0.5mm, etc.)
(4) Characteristic (T : Normal, Q : High Q, U : High Q& Low Rdc)
(5) Inductance (4N7 : 4.7nH, 10N : 10nH, R10 : 100nH)
(6) Tolerance (B : ±0.1nH, C : ±0.2nH, S : ±0.3nH, H : ±3%, J : ±5%)
(7) Thickness option (N : Standard)
(8) Packaging (C: Paper tape, 7" Reel)

CIH 0402(01005) Type - Normal

Part No.	Inductance (nH)@100MHz	Q (Min.) @100 MHz	Q (typical) Frequency					SRF [MHz] min.	DC resistance (Ω)Max.	Rated current (mA) Max.
			500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 02T 0N2 □	0.2nH±0.1nH, 0.2nH, 0.3nH	-	11	13	23	24	27	10000	0.1	350
CIH 02T 0N3 □	0.3nH±0.1nH, 0.2nH, 0.3nH	-	11	13	23	24	27	10000	0.2	350
CIH 02T 0N4 □	0.4nH±0.1nH, 0.2nH, 0.3nH	-	12	14	24	25	29	10000	0.2	350
CIH 02T 0N5 □	0.5nH±0.1nH, 0.2nH, 0.3nH	-	12	14	24	25	29	10000	0.2	350
CIH 02T 0N6 □	0.6nH±0.1nH, 0.2nH, 0.3nH	-	12	15	26	27	31	10000	0.3	320
CIH 02T 0N7 □	0.7nH±0.1nH, 0.2nH, 0.3nH	-	12	15	26	27	31	10000	0.4	320
CIH 02T 0N8 □	0.8nH±0.1nH, 0.2nH, 0.3nH	-	12	14	27	27	31	10000	0.4	320
CIH 02T 0N9 □	0.9nH±0.1nH, 0.2nH, 0.3nH	2	11	13	22	28	32	10000	0.4	320
CIH 02T 1N0 □	1.0nH±0.1nH, 0.2nH, 0.3nH	2	11	13	22	23	27	10000	0.4	250
CIH 02T 1N1 □	1.1nH±0.1nH, 0.2nH, 0.3nH	2	11	14	23	23	27	10000	0.5	250
CIH 02T 1N2 □	1.2nH±0.1nH, 0.2nH, 0.3nH	2	11	14	24	24	28	10000	0.5	250
CIH 02T 1N3 □	1.3nH±0.1nH, 0.2nH, 0.3nH	2	11	14	24	25	29	10000	0.6	250
CIH 02T 1N4 □	1.4nH±0.1nH, 0.2nH, 0.3nH	2	10	13	22	25	29	10000	0.6	250
CIH 02T 1N5 □	1.5nH±0.1nH, 0.2nH, 0.3nH	2	10	13	22	23	26	10000	0.6	220
CIH 02T 1N6 □	1.6nH±0.1nH, 0.2nH, 0.3nH	2	10	13	22	23	26	10000	0.6	220
CIH 02T 1N7 □	1.7nH±0.1nH, 0.2nH, 0.3nH	2	10	13	23	23	26	10000	0.6	200
CIH 02T 1N8 □	1.8nH±0.1nH, 0.2nH, 0.3nH	2	11	14	23	24	27	10000	0.6	200
CIH 02T 1N9 □	1.9nH±0.1nH, 0.2nH, 0.3nH	2	10	14	22	25	28	9000	0.6	200
CIH 02T 2N0 □	2.0nH±0.1nH, 0.2nH, 0.3nH	2	10	13	21	24	26	9000	0.6	200
CIH 02T 2N1 □	2.1nH±0.1nH, 0.2nH, 0.3nH	2	10	13	21	23	25	8000	0.7	200
CIH 02T 2N2 □	2.2nH±0.1nH, 0.2nH, 0.3nH	2	10	13	21	23	25	8000	0.8	200
CIH 02T 2N3 □	2.3nH±0.1nH, 0.2nH, 0.3nH	2	10	13	21	23	26	7000	0.8	200
CIH 02T 2N4 □	2.4nH±0.1nH, 0.2nH, 0.3nH	2	10	13	21	23	25	7000	0.8	200
CIH 02T 2N5 □	2.5nH±0.1nH, 0.2nH, 0.3nH	2	10	13	21	23	25	7000	0.8	200
CIH 02T 2N6 □	2.6nH±0.1nH, 0.2nH, 0.3nH	2	11	13	22	22	25	7000	0.8	200
CIH 02T 2N7 □	2.7nH±0.1nH, 0.2nH, 0.3nH	2	11	13	22	23	26	7000	0.8	200
CIH 02T 2N8 □	2.8nH±0.1nH, 0.2nH, 0.3nH	2	10	13	20	23	26	7000	0.8	200
CIH 02T 2N9 □	2.9nH±0.1nH, 0.2nH, 0.3nH	2	10	13	20	22	24	7000	0.8	200
CIH 02T 3N0 □	3.0nH±0.1nH, 0.2nH, 0.3nH	2	10	13	20	21	23	7000	0.8	200
CIH 02T 3N1 □	3.1nH±0.1nH, 0.2nH, 0.3nH	2	10	13	20	21	24	7000	0.9	200
CIH 02T 3N2 □	3.2nH±0.1nH, 0.2nH, 0.3nH	2	10	13	21	21	24	7000	1.0	200
CIH 02T 3N3 □	3.3nH±0.1nH, 0.2nH, 0.3nH	2	10	13	21	23	25	7000	1.1	180
CIH 02T 3N4 □	3.4nH±0.1nH, 0.2nH, 0.3nH	2	10	12	22	24	25	6500	1.1	180
CIH 02T 3N5 □	3.5nH±0.1nH, 0.2nH, 0.3nH	2	11	13	22	24	25	6000	1.1	180
CIH 02T 3N6 □	3.6nH±0.1nH, 0.2nH, 0.3nH	2	10	14	22	24	26	6000	1.1	180
CIH 02T 3N7 □	3.7nH±0.1nH, 0.2nH, 0.3nH	2	10	12	20	22	25	6000	1.1	180
CIH 02T 3N8 □	3.8nH±0.1nH, 0.2nH, 0.3nH	2	10	13	20	21	23	6000	1.1	180
CIH 02T 3N9 □	3.9nH±0.1nH, 0.2nH, 0.3nH	2	10	12	20	22	23	6000	1.2	180
CIH 02T 4N0 □	4.0nH±0.1nH, 0.2nH, 0.3nH	2	10	13	20	21	24	6000	1.2	180
CIH 02T 4N3 □	4.3nH±0.3nH, 3%,5%	2	11	13	21	22	24	6000	1.2	180
CIH 02T 4N7 □	4.7nH±0.3nH, 3%,5%	2	10	13	21	22	25	6000	1.3	160
CIH 02T 5N1 □	5.1nH±0.3nH, 3%,5%	2	11	14	22	23	25	6000	1.4	160
CIH 02T 5N6 □	5.6nH±0.3nH, 3%,5%	2	10	13	20	22	25	6000	1.5	140
CIH 02T 6N2 □	6.2nH±0.3nH, 3%,5%	2	10	14	21	23	23	5500	1.5	140
CIH 02T 6N8 □	6.8nH±3%, 5%	2	11	13	21	22	22	5500	1.6	140
CIH 02T 7N5 □	7.5nH±3%, 5%	2	10	14	21	22	24	5000	1.7	140
CIH 02T 8N2 □	8.2nH±3%, 5%	2	11	13	21	22	24	4500	1.8	140
CIH 02T 9N1 □	9.1nH±3%, 5%	2	11	14	20	21	23	4000	1.8	140
CIH 02T 10N □	10nH±3%, 5%	3	11	14	21	22	23	4000	2.1	140
CIH 02T 12N □	12nH±3%, 5%	3	10	13	17	18	19	3500	2.4	140
CIH 02T 15N □	15nH±3%, 5%	3	11	13	17	18	18	3000	2.6	140
CIH 02T 18N □	18nH±3%, 5%	3	10	12	17	16	16	2500	2.8	140

※Thickness : 0.2±0.02mm, □Tolerance (B : ±0.1nH, C : ±0.2nH, S : ±0.3nH, H : ±3%, J : ±5%)

※Measurement equipment & Jig

- Impedance Measuring equipment & Jig : Agilent E4991A + 16197A Bottom Electrode SMD Test Fixture or Equivalent
- Resistance Measuring equipment & Jig : Agilent 4338B + 16089A Large Kelvin Clip Leads or Equivalent

※Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

CIH 0603(0201) Type - Normal

Part No.	Thickness (mm)	Inductance (nH)@100MHz	Q(Min.) @100MHz	Q (typical) Frequency					SRF [MHz] min.	DC resistance (Ω)Max.	Rated current (mA)Max.
				500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 03T 1N0 □	0.3±0.03	1.0±0.2nH, 0.3nH	4	17	20	28	30	33	13000	0.14	300
CIH 03T 1N2 □	0.3±0.03	1.2±0.2nH, 0.3nH	4	16	20	28	30	33	10000	0.14	250
CIH 03T 1N3 □	0.3±0.03	1.3±0.2nH, 0.3nH	4	16	20	28	30	33	10000	0.14	250
CIH 03T 1N5 □	0.3±0.03	1.5±0.2nH, 0.3nH	4	15	20	27	29	32	10000	0.18	230
CIH 03T 1N8 □	0.3±0.03	1.8±0.2nH, 0.3nH	4	15	20	27	29	31	10000	0.19	200
CIH 03T 2N0 □	0.3±0.03	2.0±0.2nH, 0.3nH	4	15	20	26	28	30	8800	0.22	200
CIH 03T 2N2 □	0.3±0.03	2.2±0.2nH, 0.3nH	4.5	15	20	26	28	30	8800	0.22	200
CIH 03T 2N4 □	0.3±0.03	2.4±0.2nH, 0.3nH	5	15	20	26	28	30	7500	0.25	200
CIH 03T 2N7 □	0.3±0.03	2.7±0.2nH, 0.3nH	5	15	20	26	28	30	7700	0.25	200
CIH 03T 3N0 □	0.3±0.03	3.0±0.2nH, 0.3nH	5	15	20	26	28	30	7200	0.27	200
CIH 03T 3N3 □	0.3±0.03	3.3±0.2nH, 0.3nH	5	15	20	26	28	30	6700	0.30	200
CIH 03T 3N6 □	0.3±0.03	3.6±0.2nH, 0.3nH	5	15	20	27	29	31	6000	0.30	200
CIH 03T 3N9 □	0.3±0.03	3.9±0.2nH, 0.3nH	5	15	20	27	29	31	6000	0.30	200
CIH 03T 4N3 □	0.3±0.03	4.3±0.2nH, 0.3nH	5	15	19	26	28	30	5600	0.35	200
CIH 03T 4N7 □	0.3±0.03	4.7±0.2nH, 0.3nH	5	15	19	26	28	30	5300	0.40	200
CIH 03T 5N6 □	0.3±0.03	5.6±0.2nH, 0.3nH	5	15	19	26	27	28	4600	0.40	200
CIH 03T 6N2 □	0.3±0.03	6.2±0.2nH, 0.3nH	5	17	18	23	24	25	4100	0.48	150
CIH 03T 6N8 □	0.3±0.03	6.8±5%	5.5	16.5	21.5	23	24	25	3900	0.48	150
CIH 03T 7N5 □	0.3±0.03	7.5±5%	5	14	18	22	23	23	3700	0.51	150
CIH 03T 8N2 □	0.3±0.03	8.2±5%	5.5	14	18	22	23	23	3400	0.55	150
CIH 03T 10N □	0.3±0.03	10.0±5%	5	14	17	22	22	21	3300	0.63	150
CIH 03T 12N □	0.3±0.03	12.0±5%	6	14	17	21	21	19	3000	0.70	150
CIH 03T 15N □	0.3±0.03	15.0±5%	6	13	16	19	18	14	2700	0.80	100
CIH 03T 18N □	0.3±0.03	18.0±5%	6	13	18	16	14	9	2100	0.90	100
CIH 03T 22N □	0.3±0.03	22.0±5%	5	13	15	14	11	5	1800	1.20	100
CIH 03T 24N □	0.3±0.03	24.0±5%	5	13	15	12	9	3	1800	1.60	100
CIH 03T 27N □	0.3±0.03	27.0±5%	4	12	14	10	7	2	1800	1.80	50
CIH 03T 33N □	0.3±0.03	33.0±5%	4	12	14	8	5	1	1700	2.10	50
CIH 03T 39N □	0.3±0.03	39.0±5%	4	12	13	4	1	-	1500	2.40	50
CIH 03T 47N □	0.3±0.03	47.0±5%	4	11	12	2	-	-	1300	2.80	50
CIH 03T 56N □	0.3±0.03	56.0±5%	4	11	11	-	-	-	1100	3.00	50
CIH 03T 68N □	0.3±0.03	68.0±5%	5	13	11	-	-	-	1050	3.00	50
CIH 03T 82N □	0.3±0.03	82.0±5%	5	12	8	-	-	-	900	4.00	50
CIH 03T R10 □	0.3±0.03	100.0±5%	5	11	-	-	-	-	770	4.50	50

※ □ :Tolerance (C:±0.2nH, S:±0.3nH, H:±3%, J:±5%)
※ Measurement equipment & Jig : Agilent E4991A+16196C or Equivalent
※ Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

CIH 0603(0201) Type - High Q

Part No.	Thickness (mm)	Inductance (nH) @500MHz	Test Freq. [MHz]	Q (Min.) @500 MHz	Q (typical) Frequency					SRF [MHz] min.	DC resistance (Ω)Max.	Rated current (mA) Max.
					500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 03Q 0N6 □	0.3±0.03	0.6±0.1nH,0.2nH, 0.3nH	500	13	>24	>31	>53	>56	>64	10000	0.06	600
CIH 03Q 0N7 □	0.3±0.03	0.7±0.1nH,0.2nH, 0.3nH	500	13	>24	>31	>53	>56	>64	10000	0.06	600
CIH 03Q 0N8 □	0.3±0.03	0.8±0.1nH,0.2nH, 0.3nH	500	13	>24	>31	>53	>56	>64	10000	0.07	550
CIH 03Q 0N9 □	0.3±0.03	0.9±0.1nH,0.2nH, 0.3nH	500	13	>24	>31	>53	>56	>64	10000	0.07	550
CIH 03Q 1N0 □	0.3±0.03	1.0±0.1nH,0.2nH, 0.3nH	500	13	24	31	53	56	64	10000	0.09	490
CIH 03Q 1N1 □	0.3±0.03	1.1±0.1nH,0.2nH, 0.3nH	500	13	24	31	53	56	64	10000	0.12	420
CIH 03Q 1N2 □	0.3±0.03	1.2±0.1nH,0.2nH, 0.3nH	500	13	22	27	50	55	59	10000	0.12	420
CIH 03Q 1N3 □	0.3±0.03	1.3±0.1nH,0.2nH, 0.3nH	500	13	22	27	50	55	59	10000	0.12	420
CIH 03Q 1N4 □	0.3±0.03	1.4±0.1nH,0.2nH, 0.3nH	500	13	19	24	39	41	47	10000	0.11	440
CIH 03Q 1N5 □	0.3±0.03	1.5±0.1nH,0.2nH, 0.3nH	500	13	19	24	39	41	46	10000	0.11	440
CIH 03Q 1N6 □	0.3±0.03	1.6±0.1nH,0.2nH, 0.3nH	500	13	19	24	39	41	46	10000	0.13	410
CIH 03Q 1N7 □	0.3±0.03	1.7±0.1nH,0.2nH, 0.3nH	500	13	19	24	39	41	46	10000	0.13	410
CIH 03Q 1N8 □	0.3±0.03	1.8±0.1nH,0.2nH, 0.3nH	500	13	18	24	39	41	46	10000	0.16	370
CIH 03Q 1N9 □	0.3±0.03	1.9±0.1nH,0.2nH, 0.3nH	500	13	18	23	37	41	45	10000	0.20	330
CIH 03Q 2N0 □	0.3±0.03	2.0±0.1nH,0.2nH, 0.3nH	500	13	18	23	37	41	45	10000	0.20	330
CIH 03Q 2N1 □	0.3±0.03	2.1±0.1nH,0.2nH, 0.3nH	500	13	17	23	37	39	44	10000	0.20	330
CIH 03Q 2N2 □	0.3±0.03	2.2±0.1nH,0.2nH, 0.3nH	500	13	17	23	37	39	43	10000	0.20	330
CIH 03Q 2N3 □	0.3±0.03	2.3±0.1nH,0.2nH, 0.3nH	500	13	17	23	36	38	43	10000	0.20	330
CIH 03Q 2N4 □	0.3±0.03	2.4±0.1nH,0.2nH, 0.3nH	500	13	17	22	36	38	42	10000	0.20	330
CIH 03Q 2N5 □	0.3±0.03	2.5±0.1nH,0.2nH, 0.3nH	500	13	17	22	34	35	39	9500	0.22	310
CIH 03Q 2N6 □	0.3±0.03	2.6±0.1nH,0.2nH, 0.3nH	500	13	17	22	33	35	39	9300	0.22	310
CIH 03Q 2N7 □	0.3±0.03	2.7±0.1nH,0.2nH, 0.3nH	500	13	17	22	33	35	39	9100	0.22	310
CIH 03Q 2N8 □	0.3±0.03	2.8±0.1nH,0.2nH, 0.3nH	500	13	17	22	33	35	39	8900	0.22	310
CIH 03Q 2N9 □	0.3±0.03	2.9±0.1nH,0.2nH, 0.3nH	500	13	17	22	33	35	39	8700	0.22	310
CIH 03Q 3N0 □	0.3±0.03	3.0±0.1nH,0.2nH, 0.3nH	500	13	17	22	33	39	43	8600	0.30	270
CIH 03Q 3N1 □	0.3±0.03	3.1±0.1nH,0.2nH, 0.3nH	500	13	17	22	33	39	43	8400	0.30	270
CIH 03Q 3N2 □	0.3±0.03	3.2±0.1nH,0.2nH, 0.3nH	500	13	18	22	33	35	39	8200	0.30	270
CIH 03Q 3N3 □	0.3±0.03	3.3±0.1nH,0.2nH, 0.3nH	500	13	18	22	33	35	39	8100	0.30	270
CIH 03Q 3N4 □	0.3±0.03	3.4±0.1nH,0.2nH, 0.3nH	500	13	16	22	33	35	39	8000	0.30	270
CIH 03Q 3N5 □	0.3±0.03	3.5±0.1nH,0.2nH, 0.3nH	500	13	16	22	33	35	39	7800	0.30	270
CIH 03Q 3N6 □	0.3±0.03	3.6±0.1nH,0.2nH, 0.3nH	500	13	16	22	33	35	39	7700	0.30	270
CIH 03Q 3N7 □	0.3±0.03	3.7±0.1nH,0.2nH, 0.3nH	500	13	16	22	33	35	38	7600	0.30	270
CIH 03Q 3N8 □	0.3±0.03	3.8±0.1nH,0.2nH, 0.3nH	500	13	16	22	33	35	38	7500	0.30	270
CIH 03Q 3N9 □	0.3±0.03	3.9±0.1nH,0.2nH, 0.3nH	500	13	16	22	33	35	38	7300	0.30	270
CIH 03Q 4N3 □	0.3±0.03	4.3±3%,5%, 0.3nH	500	13	16	21	32	34	37	6500	0.38	260
CIH 03Q 4N7 □	0.3±0.03	4.7±3%,5%, 0.3nH	500	13	16	21	32	34	37	6200	0.44	220
CIH 03Q 5N1 □	0.3±0.03	5.1±3%,5%, 0.3nH	500	13	16	21	32	34	37	5900	0.44	220
CIH 03Q 5N6 □	0.3±0.03	5.6±3%,5%, 0.3nH	500	13	16	21	32	34	37	5500	0.47	210
CIH 03Q 6N2 □	0.3±0.03	6.2±3%,5%, 0.3nH	500	13	16	21	32	33	36	5100	0.47	210
CIH 03Q 6N8 □	0.3±0.03	6.8±3%, 5%	500	13	16	21	31	32	35	4800	0.55	190
CIH 03Q 7N5 □	0.3±0.03	7.5±3%, 5%	500	13	16	20	30	32	34	4600	0.61	190
CIH 03Q 8N2 □	0.3±0.03	8.2±3%, 5%	500	13	16	20	30	31	33	4300	0.57	190
CIH 03Q 9N1 □	0.3±0.03	9.1±3%, 5%	500	13	16	20	30	30	32	4000	0.73	170
CIH 03Q 10N □	0.3±0.03	10.0±3%, 5%	500	13	16	20	28	29	31	3800	0.73	170
CIH 03Q 12N □	0.3±0.03	12.0±3%, 5%	500	12	16	20	27	27	27	3300	0.85	160
CIH 03Q 15N □	0.3±0.03	15.0±3%, 5%	500	12	15	19	24	24	23	2600	0.89	150
CIH 03Q 18N □	0.3±0.03	18.0±3%, 5%	500	11	15	19	23	23	21	2300	1.05	140
CIH 03Q 22N □	0.3±0.03	22.0±3%, 5%	500	10	15	19	22	22	19	1900	1.29	130

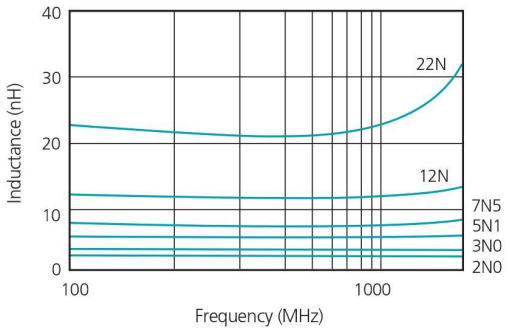
※ □:Tolerance (B:±0.1nH, C:±0.2nH, S:±0.3nH, H:±3%, J:±5%)
※ Measurement equipment & Jig
- Impedance Measuring equipment & Jig : Agilent E4991A + 16197A Bottom Electrode SMD Test Fixture or Equivalent
- Resistance Measuring equipment & Jig : Agilent 4338B + 16089A Large Kelvin Clip Leads or Equivalent

※ Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

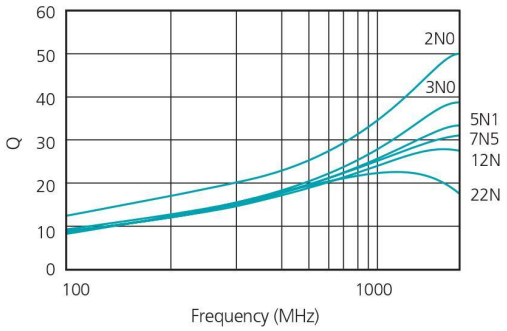
CIH 0603(0201) Type - High Q

Part No.	Thickness (mm)	Inductance (nH)@500MHz	Test Freq. [MHz]	Q (Min.) @500 MHz	Q (typical) Frequency					SRF [MHz] min.	DC resistance (Ω)Max.	Rated current (mA) Max.
					500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 03Q 27N □	0.3±0.03	27.0 ±5%	500	14	18	21	18	15	-	2200	1.9	140
CIH 03Q 33N □	0.3±0.03	33.0 ±5%	300	10	16	17	11	-	-	1800	2.0	140
CIH 03Q 39N □	0.3±0.03	39.0 ±5%	300	10	15	17	-	-	-	1800	2.1	130
CIH 03Q 47N □	0.3±0.03	47.0 ±5%	300	10	16	17	-	-	-	1600	2.6	120
CIH 03Q 56N □	0.3±0.03	56.0 ±5%	300	10	15	15	-	-	-	1400	3.3	110
CIH 03Q 68N □	0.3±0.03	68.0 ±5%	300	9	15	15	-	-	-	1200	3.3	110
CIH 03Q 82N □	0.3±0.03	82.0 ±5%	300	9	15	14	-	-	-	1200	3.8	100
CIH 03Q R10 □	0.3±0.03	100.0±5%	300	9	14	12	-	-	-	900	4.3	90

INDUCTANCE



Q CHARACTERISTIC



※ □:Tolerance (B:±0.1nH, C:±0.2nH, S:±0.3nH, H:±3%, J:±5%)

※ Measurement equipment & Jig

- Impedance Measuring equipment & Jig : Agilent E4991A + 16197A Bottom Electrode SMD Test Fixture or Equivalent
- Resistance Measuring equipment & Jig : Agilent 4338B + 16089A Large Kelvin Clip Leads or Equivalent

※ Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

CIH 0603(0201) Type - High Q & Low RDC

Part No.	Thickness (mm)	Inductance (nH)@500MHz	Test Freq. [MHz]	Q (Min.) @500 MHz	Q (typical) Frequency					SRF [MHz] min.	DC resistance (Ω)Max.	Rated current (mA) Max.
					500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 03U 0N6 □	0.3±0.03	0.6±0.1nH, 0.2nH, 0.3nH	500	15	>24	>31	>53	>56	>64	>10000	0.06	1000
CIH 03U 0N7 □	0.3±0.03	0.7±0.1nH, 0.2nH, 0.3nH	500	15	>24	>31	>53	>56	>64	>10000	0.06	1000
CIH 03U 0N8 □	0.3±0.03	0.8±0.1nH, 0.2nH, 0.3nH	500	15	>24	>31	>53	>56	>64	>10000	0.06	1000
CIH 03U 0N9 □	0.3±0.03	0.9±0.1nH, 0.2nH, 0.3nH	500	15	>24	>31	>53	>56	>64	>10000	0.06	1000
CIH 03U 1N0 □	0.3±0.03	1.0±0.1nH, 0.2nH, 0.3nH	500	15	24	31	53	56	64	>10000	0.07	1000
CIH 03U 1N1 □	0.3±0.03	1.1±0.1nH, 0.2nH, 0.3nH	500	15	24	31	53	56	64	>10000	0.07	1000
CIH 03U 1N2 □	0.3±0.03	1.2±0.1nH, 0.2nH, 0.3nH	500	15	22	27	50	55	59	>10000	0.10	800
CIH 03U 1N3 □	0.3±0.03	1.3±0.1nH, 0.2nH, 0.3nH	500	15	22	27	50	55	59	>10000	0.10	800
CIH 03U 1N4 □	0.3±0.03	1.4±0.1nH, 0.2nH, 0.3nH	500	15	21	24	39	41	47	>10000	0.10	800
CIH 03U 1N5 □	0.3±0.03	1.5±0.1nH, 0.2nH, 0.3nH	500	15	21	24	39	41	46	>10000	0.10	800
CIH 03U 1N6 □	0.3±0.03	1.6±0.1nH, 0.2nH, 0.3nH	500	14	19	24	39	41	46	>10000	0.15	800
CIH 03U 1N7 □	0.3±0.03	1.7±0.1nH, 0.2nH, 0.3nH	500	14	19	24	39	41	46	>10000	0.15	800
CIH 03U 1N8 □	0.3±0.03	1.8±0.1nH, 0.2nH, 0.3nH	500	14	18	24	39	41	46	>10000	0.15	800
CIH 03U 1N9 □	0.3±0.03	1.9±0.1nH, 0.2nH, 0.3nH	500	14	18	24	37	41	45	>10000	0.15	800
CIH 03U 2N0 □	0.3±0.03	2.0±0.1nH, 0.2nH, 0.3nH	500	14	19	23	37	41	45	>10000	0.15	800
CIH 03U 2N1 □	0.3±0.03	2.1±0.1nH, 0.2nH, 0.3nH	500	15	21	24	37	39	44	>10000	0.15	700
CIH 03U 2N2 □	0.3±0.03	2.2±0.1nH, 0.2nH, 0.3nH	500	15	21	24	37	39	43	>10000	0.15	700
CIH 03U 2N3 □	0.3±0.03	2.3±0.1nH, 0.2nH, 0.3nH	500	15	20	24	36	38	43	>10000	0.18	700
CIH 03U 2N4 □	0.3±0.03	2.4±0.1nH, 0.2nH, 0.3nH	500	15	20	24	36	38	42	>10000	0.18	700
CIH 03U 2N5 □	0.3±0.03	2.5±0.1nH, 0.2nH, 0.3nH	500	15	20	24	36	38	42	>10000	0.20	600
CIH 03U 2N6 □	0.3±0.03	2.6±0.1nH, 0.2nH, 0.3nH	500	14	19	22	35	36	40	>10000	0.20	600
CIH 03U 2N7 □	0.3±0.03	2.7±0.1nH, 0.2nH, 0.3nH	500	14	19	22	35	36	40	>10000	0.25	600
CIH 03U 2N8 □	0.3±0.03	2.8±0.1nH, 0.2nH, 0.3nH	500	14	19	22	35	36	40	9500	0.25	600
CIH 03U 2N9 □	0.3±0.03	2.9±0.1nH, 0.2nH, 0.3nH	500	14	19	22	35	36	40	9500	0.25	600
CIH 03U 3N0 □	0.3±0.03	3.0±0.1nH, 0.2nH, 0.3nH	500	14	19	22	35	39	43	9000	0.25	500
CIH 03U 3N1 □	0.3±0.03	3.1±0.1nH, 0.2nH, 0.3nH	500	14	17	22	33	39	43	9000	0.25	500
CIH 03U 3N2 □	0.3±0.03	3.2±0.1nH, 0.2nH, 0.3nH	500	14	18	22	34	35	39	9000	0.25	500
CIH 03U 3N3 □	0.3±0.03	3.3±0.1nH, 0.2nH, 0.3nH	500	14	18	22	33	35	39	9000	0.25	500
CIH 03U 3N4 □	0.3±0.03	3.4±0.1nH, 0.2nH, 0.3nH	500	14	18	23	34	35	39	8700	0.25	500
CIH 03U 3N5 □	0.3±0.03	3.5±0.1nH, 0.2nH, 0.3nH	500	14	18	23	34	35	38	8700	0.25	500
CIH 03U 3N6 □	0.3±0.03	3.6±0.1nH, 0.2nH, 0.3nH	500	14	18	23	33	35	39	8500	0.25	450
CIH 03U 3N7 □	0.3±0.03	3.7±0.1nH, 0.2nH, 0.3nH	500	14	18	23	34	35	38	8500	0.25	450
CIH 03U 3N8 □	0.3±0.03	3.8±0.1nH, 0.2nH, 0.3nH	500	14	18	22	33	35	38	8000	0.25	450
CIH 03U 3N9 □	0.3±0.03	3.9±0.1nH, 0.2nH, 0.3nH	500	14	18	22	33	35	38	8000	0.25	450
CIH 03U 4N3 □	0.3±0.03	4.3±3%, 5%, 0.3nH	500	14	18	22	32	34	37	7000	0.35	400
CIH 03U 4N7 □	0.3±0.03	4.7±3%, 5%, 0.3nH	500	14	18	22	31	32	34	7000	0.35	400
CIH 03U 5N1 □	0.3±0.03	5.1±3%, 5%, 0.3nH	500	14	18	22	32	34	37	6000	0.35	400
CIH 03U 5N6 □	0.3±0.03	5.6±3%, 5%, 0.3nH	500	14	18	22	32	34	37	6000	0.35	400
CIH 03U 6N2 □	0.3±0.03	6.2±3%, 5%, 0.3nH	500	14	18	22	32	33	36	5500	0.40	350
CIH 03U 6N8 □	0.3±0.03	6.8±3%, 5%	500	14	18	22	31	32	35	5500	0.40	350
CIH 03U 7N5 □	0.3±0.03	7.5±3%, 5%	500	14	18	22	30	32	34	5000	0.50	350
CIH 03U 8N2 □	0.3±0.03	8.2±3%, 5%	500	14	18	22	30	31	33	5000	0.50	350
CIH 03U 9N1 □	0.3±0.03	9.1±3%, 5%	500	14	18	22	30	31	32	4500	0.60	350

※ □:Tolerance (B:±0.1nH, C:±0.2nH, S:±0.3nH, H:±3%, J:±5%)

※ Measurement equipment & Jig

- Impedance Measuring equipment & Jig : Agilent E4991A + 16197A Bottom Electrode SMD Test Fixture or Equivalent
- Resistance Measuring equipment & Jig : Agilent 4338B + 16089A Large Kelvin Clip Leads or Equivalent

※ Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

CIH 0603(0201) Type - High Q & Low RDC

Part No.	Thickness (mm)	Inductance (nH)@500MHz	Test Freq. [MHz]	Q (Min.) @500 MHz	Q (typical) Frequency					SRF [MHz] min.	DC resistance (Ω)Max.	Rated current (mA) Max.
					500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 03U 10N □	0.3±0.03	10.0±3%, 5%	500	14	18	22	28	29	31	4500	0.60	350
CIH 03U 12N □	0.3±0.03	12.0±3%, 5%	500	14	18	22	28	28	27	4000	0.70	180
CIH 03U 15N □	0.3±0.03	15.0±3%, 5%	500	14	18	22	27	26	24	3500	0.85	170
CIH 03U 18N □	0.3±0.03	18.0±3%, 5%	500	14	18	22	25	24	21	3100	1.00	160
CIH 03U 22N □	0.3±0.03	22.0±3%, 5%	500	14	18	21	22	22	19	2300	1.15	150
CIH 03U 27N □	0.3±0.03	27.0±5%	500	14	18	21	18	15	-	2200	1.90	140
CIH 03U 33N □	0.3±0.03	33.0±5%	300	10	16	17	11	-	-	1800	2.00	140
CIH 03U 39N □	0.3±0.03	39.0±5%	300	10	15	17	-	-	-	1800	2.10	130
CIH 03U 47N □	0.3±0.03	47.0±5%	300	10	16	17	-	-	-	1600	2.60	120
CIH 03U 56N □	0.3±0.03	56.0±5%	300	10	15	15	-	-	-	1400	3.30	110
CIH 03U 68N □	0.3±0.03	68.0±5%	300	9	15	15	-	-	-	1200	3.30	110
CIH 03U 82N □	0.3±0.03	82.0±5%	300	9	15	14	-	-	-	1200	3.80	100
CIH 03U R10 □	0.3±0.03	100.0±5%	300	9	14	12	-	-	-	900	4.30	90

※□:Tolerance (B:±0.1nH, C:±0.2nH, S:±0.3nH, H:±3%, J:±5%)

※Measurement equipment & Jig

- Impedance Measuring equipment & Jig : Agilent E4991A + 16197A Bottom Electrode SMD Test Fixture or Equivalent
- Resistance Measuring equipment & Jig : Agilent 4338B + 16089A Large Kelvin Clip Leads or Equivalent

※Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

CIH 1005(0402) Type

Part No.	Thickness (mm)	Inductance (nH)@100MHz	Q (Min) @100 MHz	Q (typical.)					SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
				500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 05T 1N0 □	0.5±0.05	1.0±0.2nH,0.3nH	8	23	29	48	50	56	10000	0.12	300
CIH 05T 1N2 □	0.5±0.05	1.2±0.2nH,0.3nH	8	23	29	48	50	56	10000	0.12	300
CIH 05T 1N5 □	0.5±0.05	1.5±0.2nH,0.3nH	8	23	29	47	50	56	6000	0.13	300
CIH 05T 1N8 □	0.5±0.05	1.8±0.2nH,0.3nH	8	20	26	41	43	49	6000	0.14	300
CIH 05T 2N0 □	0.5±0.05	2.0±0.2nH,0.3nH	8	22	27	44	47	52	6000	0.16	300
CIH 05T 2N2 □	0.5±0.05	2.2±0.2nH,0.3nH	8	22	27	44	47	52	6000	0.16	300
CIH 05T 2N4 □	0.5±0.05	2.4±0.2nH,0.3nH	8	22	27	44	47	52	6000	0.16	300
CIH 05T 2N7 □	0.5±0.05	2.7±0.2nH,0.3nH	8	22	27	43	45	50	6000	0.17	300
CIH 05T 3N0 □	0.5±0.05	3.0±0.2nH,0.3nH	8	24	30	46	48	53	6000	0.19	300
CIH 05T 3N3 □	0.5±0.05	3.3±0.2nH,0.3nH	8	24	30	46	48	53	6000	0.19	300
CIH 05T 3N6 □	0.5±0.05	3.6±0.2nH,0.3nH	8	24	30	46	48	53	6000	0.19	300
CIH 05T 3N9 □	0.5±0.05	3.9±0.2nH,0.3nH	8	22	28	43	45	50	4000	0.22	300
CIH 05T 4N3 □	0.5±0.05	4.3±0.2nH,0.3nH	8	22	28	43	45	50	4000	0.24	300
CIH 05T 4N7 □	0.5±0.05	4.7±0.2nH,0.3nH	8	23	30	45	47	50	4000	0.24	300
CIH 05T 5N1 □	0.5±0.05	5.1±0.2nH,0.3nH	8	22	28	42	43	45	4000	0.27	300
CIH 05T 5N6 □	0.5±0.05	5.6±0.2nH,0.3nH	8	22	28	42	43	45	4000	0.27	300
CIH 05T 6N2 □	0.5±0.05	6.2±0.2nH,0.3nH	8	22	28	40	41	41	3900	0.32	300
CIH 05T 6N8 □	0.5±0.05	6.8±5%, 10%	8	22	28	40	41	41	3900	0.32	300
CIH 05T 7N5 □	0.5±0.05	7.5±5%, 10%	8	22	28	38	38	36	3600	0.37	300
CIH 05T 8N2 □	0.5±0.05	8.2±5%, 10%	8	22	28	38	38	36	3600	0.37	300
CIH 05T 9N1 □	0.5±0.05	9.1±5%, 10%	8	22	28	37	36	31	3200	0.42	300
CIH 05T 10N □	0.5±0.05	10.0±5%, 10%	8	22	28	37	36	31	3200	0.42	300
CIH 05T 12N □	0.5±0.05	12.0±5%, 10%	8	22	28	33	31	23	2700	0.50	300
CIH 05T 15N □	0.5±0.05	15.0±5%, 10%	8	22	28	29	26	17	2300	0.55	300
CIH 05T 18N □	0.5±0.05	18.0±5%, 10%	8	23	28	26	22	11	2100	0.65	250
CIH 05T 22N □	0.5±0.05	22.0±5%, 10%	8	22	27	21	14	2	1900	0.80	250
CIH 05T 27N □	0.5±0.05	27.0±5%, 10%	8	20	23	10	3	-	1600	0.90	250
CIH 05T 33N □	0.5±0.05	33.0±5%, 10%	8	20	23	3	-	-	1300	1.00	250
CIH 05T 39N □	0.5±0.05	39.0±5%, 10%	8	20	21	-	-	-	1200	1.20	200
CIH 05T 47N □	0.5±0.05	47.0±5%, 10%	8	19	20	-	-	-	1000	1.30	200
CIH 05T 56N □	0.5±0.05	56.0±5%, 10%	8	19	18	-	-	-	750	1.40	180
CIH 05T 68N □	0.5±0.05	68.0±5%, 10%	8	17	15	-	-	-	750	1.40	180
CIH 05T 82N □	0.5±0.05	82.0±5%, 10%	8	16	11	-	-	-	600	1.60	150
CIH 05T R10 □	0.5±0.05	100.0±5%, 10%	8	15	9	-	-	-	600	1.60	130

※ □:Tolerance (C:±0.2nH, S:±0.3nH, J:±5%, K:±10%)
※ Measurement equipment & Jig : Agilent E4991A+16192A or Equivalent
※ Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

CIH 1005(0402) High Q Type

Part No.	Thickness (mm)	Inductance (nH)@100MHz	Q (Min) @100 MHz	Q (typical.)					SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
				500MHz	800MHz	1.8GHz	2.0GHz	2.4GHz			
CIH 05Q 1N0 □	0.5±0.05	1.0nH±0.3nH	8	23	34	51	54	57	10000	0.07	1000
CIH 05Q 1N2 □	0.5±0.05	1.2nH±0.3nH	8	23	36	56	58	60	6000	0.09	1000
CIH 05Q 1N5 □	0.5±0.05	1.5nH±0.3nH	8	23	34	50	53	55	6000	0.10	1000
CIH 05Q 1N8 □	0.5±0.05	1.8nH±0.3nH	8	20	33	48	49	50	6000	0.10	900
CIH 05Q 2N2 □	0.5±0.05	2.2nH±0.3nH	8	22	34	48	49	50	6000	0.12	900
CIH 05Q 2N4 □	0.5±0.05	2.4nH±0.3nH	8	22	34	51	52	52	6000	0.15	800
CIH 05Q 2N7 □	0.5±0.05	2.7nH±0.3nH	8	22	33	49	50	50	6000	0.15	800
CIH 05Q 3N0 □	0.5±0.05	3.0nH±0.3nH	8	24	34	49	51	50	6000	0.17	800
CIH 05Q 3N3 □	0.5±0.05	3.3nH±0.3nH	8	24	33	46	47	46	6000	0.17	800
CIH 05Q 3N6 □	0.5±0.05	3.6nH±0.3nH	8	24	33	45	47	46	6000	0.18	700
CIH 05Q 3N9 □	0.5±0.05	3.9nH±0.3nH	8	22	33	49	47	46	6000	0.18	700
CIH 05Q 4N3 □	0.5±0.05	4.3nH±0.3nH	8	22	33	44	45	44	6000	0.18	700
CIH 05Q 4N7 □	0.5±0.05	4.7nH±0.3nH	8	23	33	42	43	42	6000	0.18	700
CIH 05Q 5N1 □	0.5±0.05	5.1nH±0.3nH	8	22	33	44	45	42	5300	0.20	600
CIH 05Q 5N6 □	0.5±0.05	5.6nH±0.3nH	8	22	32	41	40	38	4500	0.20	600
CIH 05Q 6N2 □	0.5±0.05	6.2nH±0.3nH	8	22	31	41	41	38	4500	0.22	600
CIH 05Q 6N8 □	0.5±0.05	6.8nH±5%	8	22	30	40	40	37	4500	0.24	600
CIH 05Q 7N5 □	0.5±0.05	7.5nH±5%	8	22	29	38	37	34	4200	0.24	500
CIH 05Q 8N2 □	0.5±0.05	8.2nH±5%	8	22	29	35	34	29	3700	0.24	500
CIH 05Q 9N1 □	0.5±0.05	9.1nH±5%	8	22	29	36	35	31	3400	0.26	500
CIH 05Q 10N □	0.5±0.05	10nH±5%	8	22	29	35	33	28	3400	0.28	500
CIH 05Q 12N □	0.5±0.05	12nH±5%	8	22	27	28	24	18	3000	0.30	400
CIH 05Q 15N □	0.5±0.05	15nH±5%	8	22	27	25	21	13	2500	0.40	400
CIH 05Q 18N □	0.5±0.05	18nH±5%	8	23	25	22	18	-	2200	0.42	350
CIH 05Q 22N □	0.5±0.05	22nH±5%	8	22	24	16	-	-	1900	0.45	350
CIH 05Q 27N □	0.5±0.05	27nH±5%	8	20	21	-	-	-	1700	0.48	300
CIH 05Q 33N □	0.5±0.05	33nH±5%	8	20	20	-	-	-	1600	0.58	300
CIH 05Q 39N □	0.5±0.05	39nH±5%	8	20	18	-	-	-	1200	0.65	250
CIH 05Q 47N □	0.5±0.05	47nH±5%	8	19	16	-	-	-	1000	0.78	250
CIH 05Q 56N □	0.5±0.05	56nH±5%	8	19	13	-	-	-	800	0.82	200
CIH 05Q 68N □	0.5±0.05	68nH±5%	8	17	10	-	-	-	800	0.92	200
CIH 05Q 82N □	0.5±0.05	82nH±5%	8	16	6	-	-	-	700	1.20	200
CIH 05Q 91N □	0.5±0.05	91nH±5%	8	-	-	-	-	-	600	1.32	200
CIH 05Q R10 □	0.5±0.05	100nH±5%	8	-	-	-	-	-	600	1.35	200
CIH 05Q R12 □	0.5±0.05	120nH±5%	8	-	-	-	-	-	600	2.00	150
CIH 05Q R15 □	0.5±0.05	150nH±5%	8	-	-	-	-	-	550	2.99	150
CIH 05Q R18 □	0.5±0.05	180nH±5%	8	-	-	-	-	-	500	3.38	150
CIH 05Q R22 □	0.5±0.05	220nH±5%	8	-	-	-	-	-	450	3.77	120
CIH 05Q R27 □	0.5±0.05	270nH±5%	8	-	-	-	-	-	400	4.94	110

※□:Tolerance (C:±0.2nH, S:±0.3nH, J:±5%, K:±10%)
※Measurement equipment & Jig : Agilent E4991A+16192A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

Residual inductance

Residual inductance	Series	Test Frequency
0nH	CIH05T, CIH05Q	100MHz
0.02nH	CIH03T	100MHz
0.11nH	CIH02T	100MHz
0.30nH	CIH03Q	500MHz (0.6 ~ 27nH)
		300MHz (33 ~ 100nH)
0.43nH	CIH03U	500MHz (0.6 ~ 27nH)
		300MHz (33 ~ 100nH)

※ Residual inductance = Short Bar Residual inductance

Feature

- Smallest beads suitable for surface mounting
- Perfect shape for automatic mounting, with no directionality.
- Excellent solderability and high heat resistance for either flow or reflow soldering.
- Monolithic inorganic material construction for high reliability.
- Closed magnetic circuit configuration avoids crosstalk and is suitable for high density PCBs.

Application

- High frequency EMI prevention application to computers, printers, VCRs, TVs and mobile phones.

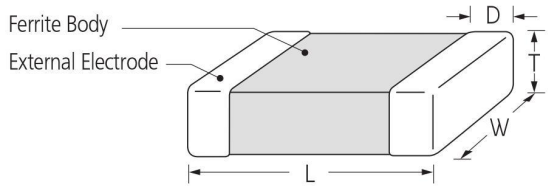
The CIM Series are used for EMI suppression filter. These beads suppress electro-magnetic wave noise by increased impedance, especially by increased resistance at noise frequency.

CIM Series

The CIM Series display high impedance because it is composed of a multilayered internal conductor and has excellent attenuation characteristics for wide band frequencies.

Operating Temp	-55~+125℃
Storage Temp (After mounting)	-55~+125℃

Dimensions



Series	Dimension (mm)			
	L	W	T	D
CIM03	0.60±0.03	0.30±0.03	0.30±0.03	0.15±0.05
CIM05	1.00±0.05	0.50±0.05	0.50±0.05	0.25±0.10
CIM10	1.60±0.15	0.80±0.15	0.80±0.15	0.30±0.20
CIM21	2.00±0.20	1.25±0.20	0.90±0.20	0.50+0.20/−0.30

Part Numbering

CI	M	03	J	121	N	C
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Product ID (Chip Beads)
(2) Type (For signal line)
(3) Dimension (03 : 0.6mm x 0.3mm, 05 : 1.0mm x 0.5mm, etc.)
(4) Characteristic
(J : Noise suppression in the 100~300MHz range, N : Noise suppression in the 200~500MHz range,
P : High current in broad band, K: Noise suppression in the 200 MHz above
U : Broad impedance, especially suppresses noise in the 10~200MHz range, etc.)
(5) Nominal impedance (110 : 11Ω, 121 : 120Ω)
(6) Thickness option (N : Standard)
(7) Packaging (E : Embossed tape, 7" Reel / C : Paper tape, 7" Reel)

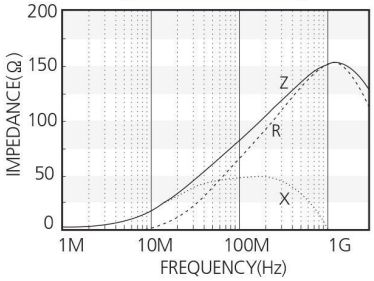
CIM 0603(0201) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIM 03U 800N □	0.3±0.03	80	0.40	200
CIM 03U 121N □	0.3±0.03	120	0.50	200
CIM 03U 241N □	0.3±0.03	240	0.75	200
CIM 03U 471N □	0.3±0.03	470	1.30	100
CIM 03U 601N □	0.3±0.03	600	1.50	100
CIM 03J 750N □	0.3±0.03	75	0.50	300
CIM 03J 121N □	0.3±0.03	120	0.50	200
CIM 03J 241N □	0.3±0.03	240	1.00	100

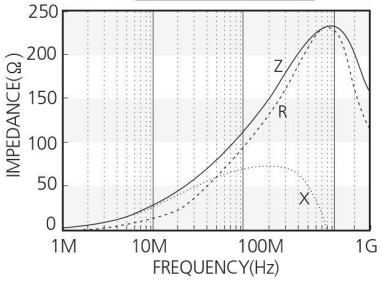
※Test equipment: Agilent E4991A +16197A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

CIM03U800



CIM03U121



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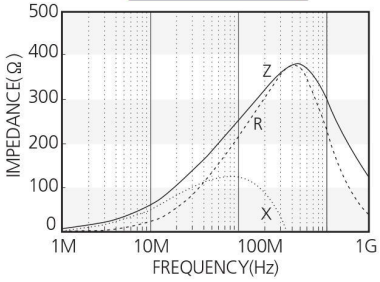

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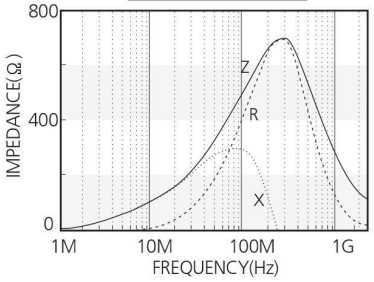

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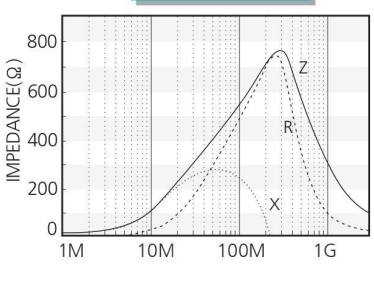

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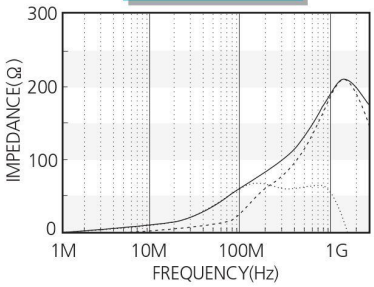

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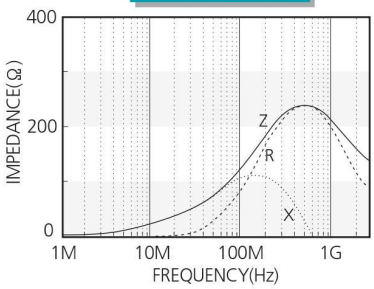

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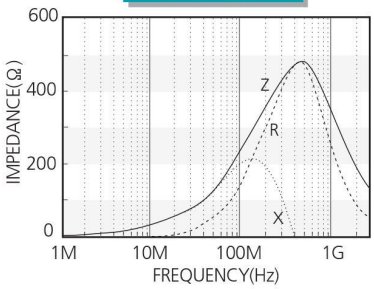


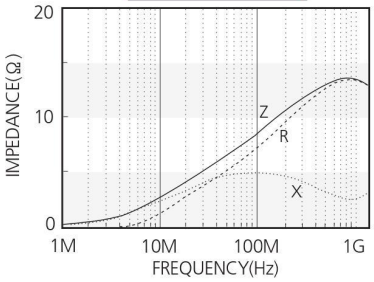
CIM1005(0402) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIM 05U 100 N□	0.5±0.05	10	0.05	1200
CIM 05U 300 N□	0.5±0.05	30	0.10	700
CIM 05U 600 N□	0.5±0.05	60	0.15	600
CIM 05U 800 N□	0.5±0.05	80	0.20	600
CIM 05U 121 N□	0.5±0.05	120	0.25	600
CIM 05U 221 N□	0.5±0.05	220	0.35	500
CIM 05U 241 N□	0.5±0.05	240	0.35	400
CIM 05U 301 N□	0.5±0.05	300	0.45	400
CIM 05U 471 N□	0.5±0.05	470	0.55	300
CIM 05U 601 N□	0.5±0.05	600	0.60	300
CIM 05U 102 N□	0.5±0.05	1000	0.80	300
CIM 05J 300 N□	0.5±0.05	30	0.20	700
CIM 05J 600 N□	0.5±0.05	60	0.20	650
CIM 05J 800 N□	0.5±0.05	80	0.25	600
CIM 05J 121 N□	0.5±0.05	120	0.25	500
CIM 05J 221 N□	0.5±0.05	220	0.35	400
CIM 05J 241 N□	0.5±0.05	240	0.35	400
CIM 05J 301 N□	0.5±0.05	300	0.45	400
CIM 05J 471 N□	0.5±0.05	470	0.55	300
CIM 05J 601 N□	0.5±0.05	600	0.60	300
CIM 05J 102 N□	0.5±0.05	1000	0.80	250
CIM 05J 152 N□	0.5±0.05	1500	1.00	250
CIM 05J 182 N□	0.5±0.05	1800	1.40	200
CIM 05N 750 N□	0.5±0.05	75	0.35	300
CIM 05N 121 N□	0.5±0.05	120	0.55	300
CIM 05N 221 N□	0.5±0.05	220	0.80	200
CIM 05F 050 N□	0.5±0.05	5	0.08	500
CIM 05F 100 N□	0.5±0.05	10	0.10	300
CIM 05F 220 N□	0.5±0.05	22	0.20	300
CIM 05F 470 N□	0.5±0.05	47	0.35	300
CIM 05F 750 N□	0.5±0.05	75	0.40	300
CIM 05F 121 N□	0.5±0.05	120	0.55	300
CIM 05F 221 N□	0.5±0.05	220	0.80	200
CIM 05H 800 N□	0.5±0.05	80	0.20	450
CIM 05H 121 N□	0.5±0.05	120	0.25	400
CIM 05H 241 N□	0.5±0.05	240	0.31	400
CIM 05H 431 N□	0.5±0.05	430	0.50	350
CIM 05H 601 N□	0.5±0.05	600	0.80	200

※Test equipment : Agilent E4991A +16192A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

CIM05U100



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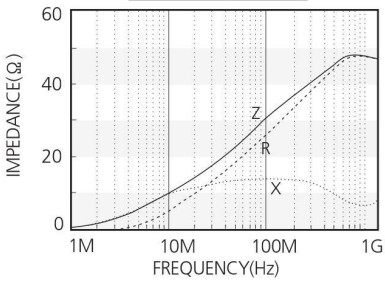

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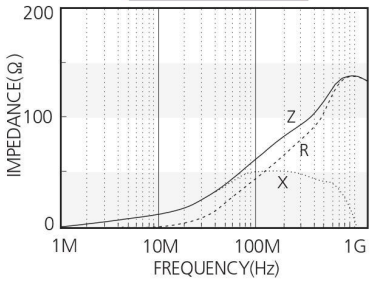

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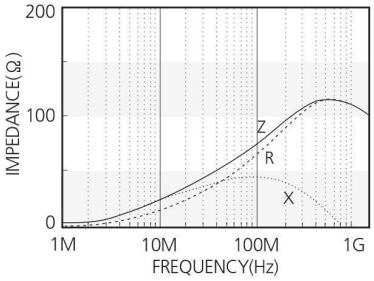

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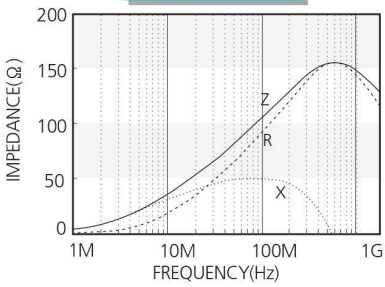

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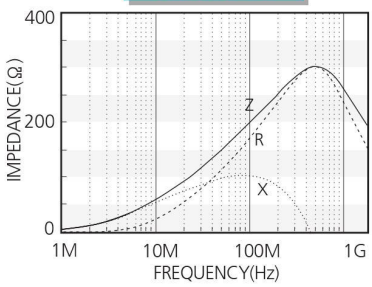

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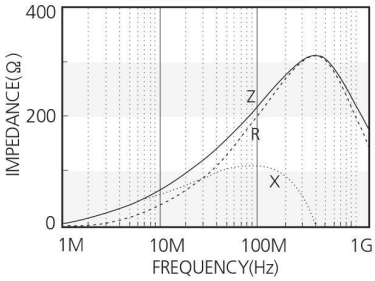

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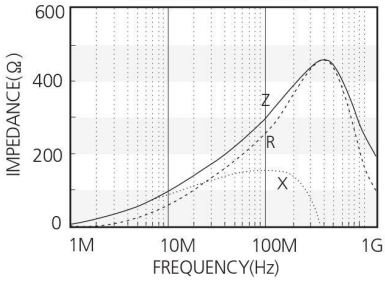

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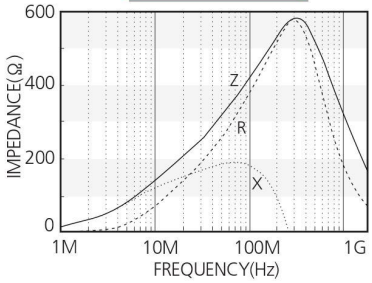

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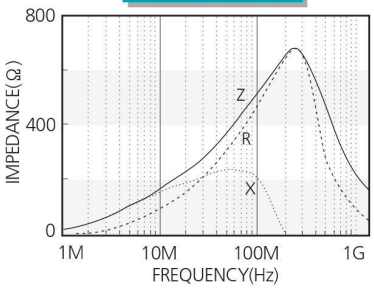

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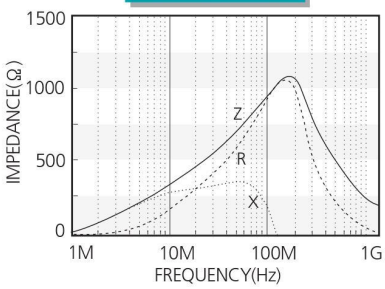

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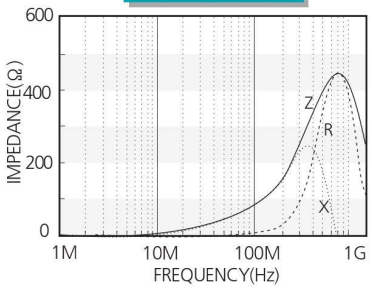

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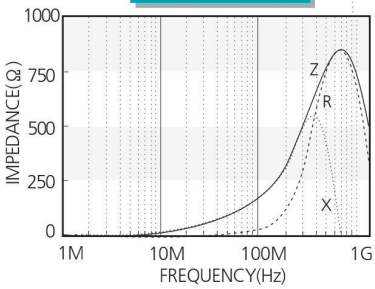

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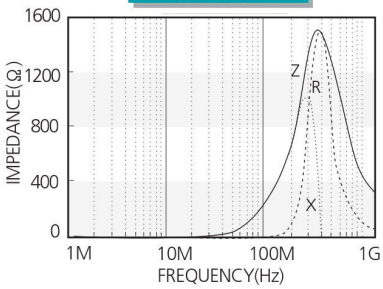
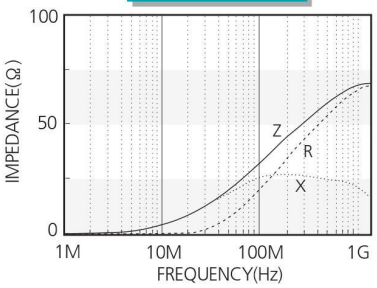


Electrical Characteristics

CIM05J300



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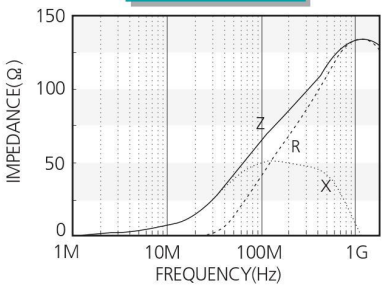

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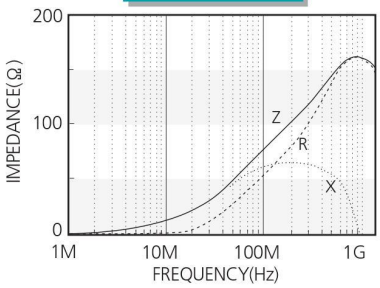

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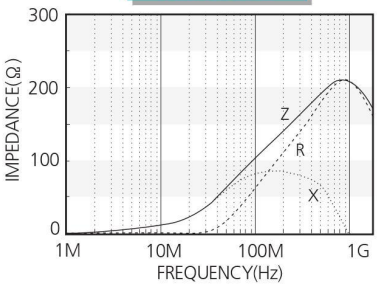

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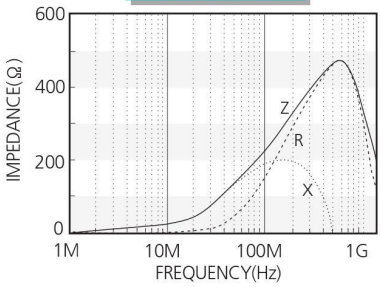

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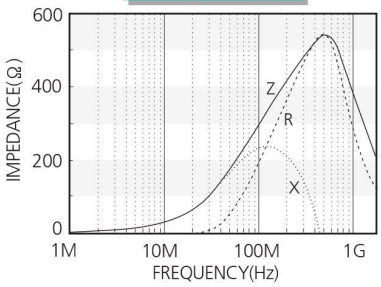

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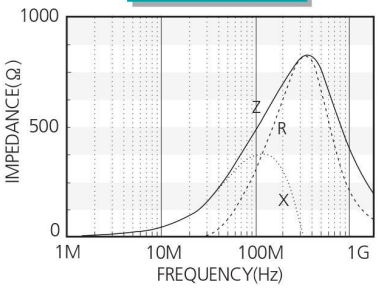

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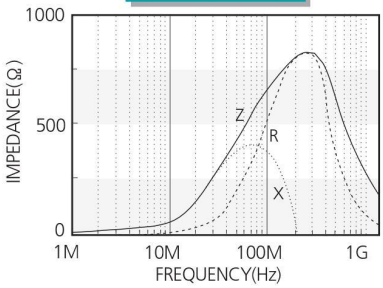

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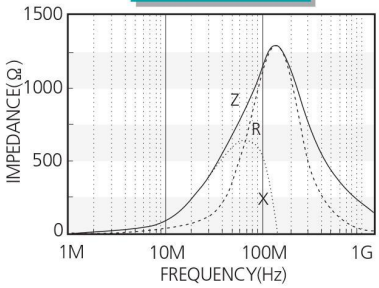

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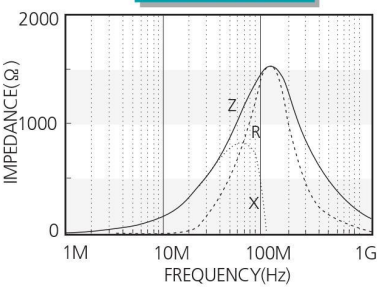

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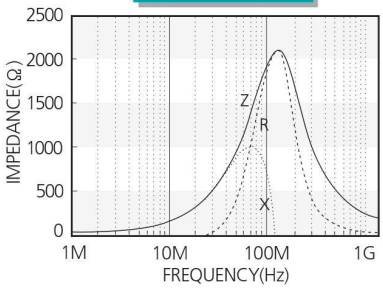

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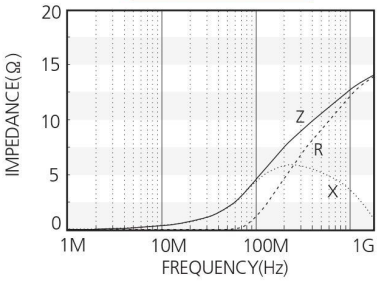

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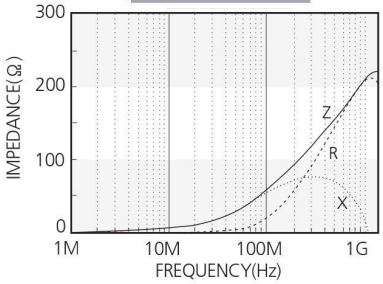

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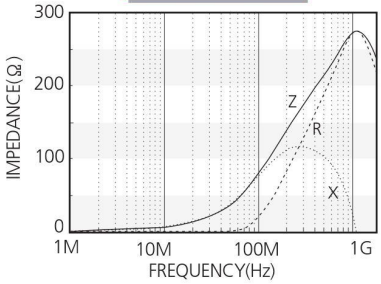
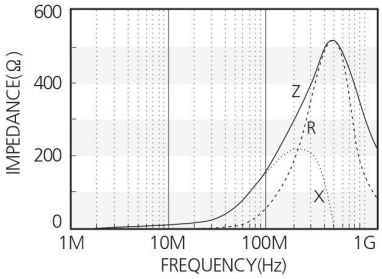


Electrical Characteristics

CIM05F121



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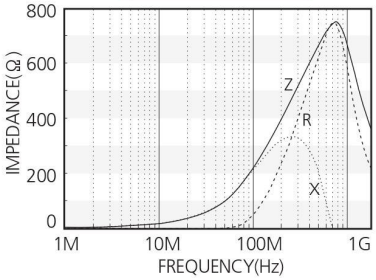

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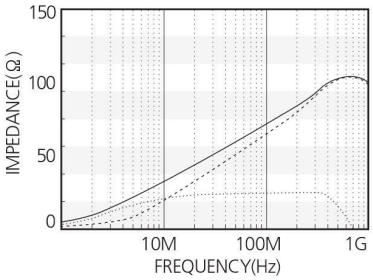
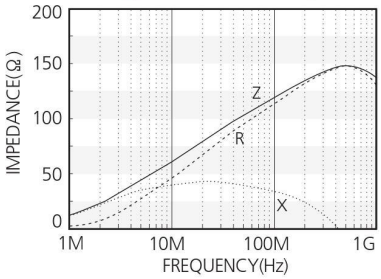
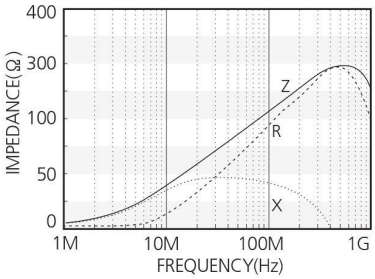


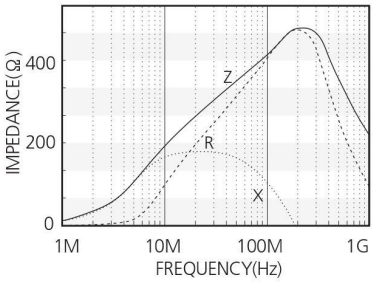
CIM05H121



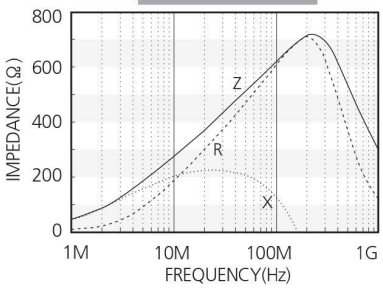
CIM05H241



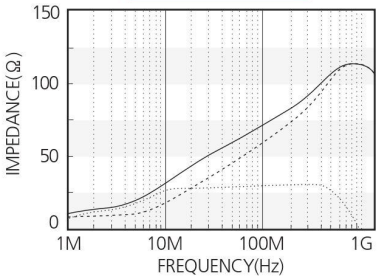
CIM05H431



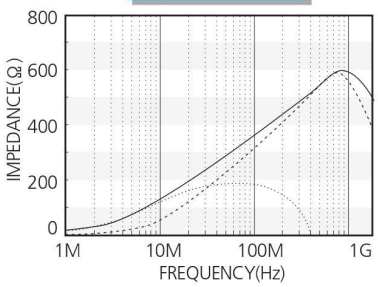
CIM05H601



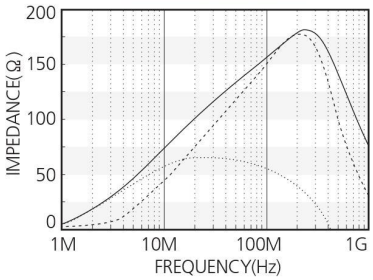
CIM05H800



CIM05H241



CIM05H121



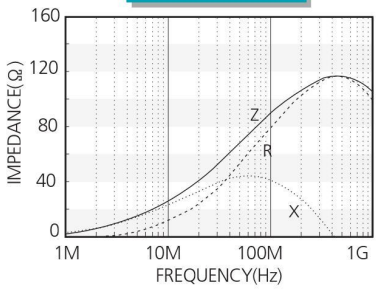
CIM 1608(0603) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIM 10U 800 N □	0.8±0.15	80	0.10	600
CIM 10U 121 N □	0.8±0.15	120	0.15	500
CIM 10U 221 N □	0.8±0.15	220	0.25	400
CIM 10U 241 N □	0.8±0.15	240	0.25	400
CIM 10U 301 N □	0.8±0.15	300	0.30	500
CIM 10U 471 N □	0.8±0.15	470	0.35	300
CIM 10U 601 N □	0.8±0.15	600	0.38	500
CIM 10U 102 N □	0.8±0.15	1000	0.50	400
CIM 10U 202 N □	0.8±0.15	2000(at 70MHz)	1.20	200
CIM 10J 400 N □	0.8±0.15	40	0.12	600
CIM 10J 470 N □	0.8±0.15	47	0.12	600
CIM 10J 600 N □	0.8±0.15	60	0.12	600
CIM 10J 750 N □	0.8±0.15	75	0.15	550
CIM 10J 800 N □	0.8±0.15	80	0.15	550
CIM 10J 121 N □	0.8±0.15	120	0.20	500
CIM 10J 151 N □	0.8±0.15	150	0.20	400
CIM 10J 221 N □	0.8±0.15	220	0.30	400
CIM 10J 241 N □	0.8±0.15	240	0.30	400
CIM 10J 301 N □	0.8±0.15	300	0.35	400
CIM 10J 331 N □	0.8±0.15	330	0.35	400
CIM 10J 471 N □	0.8±0.15	470	0.35	300
CIM 10J 601 N □	0.8±0.15	600	0.45	300
CIM 10J 751 N □	0.8±0.15	750	0.50	300
CIM 10J 102 N □	0.8±0.15	1000	0.60	250
CIM 10J 152 N □	0.8±0.15	1500	0.70	250
CIM 10J 252 N □	0.8±0.15	2500	1.50	200
CIM 10K 152 N □	0.8±0.15	1500	0.80	250
CIM 10K 202 N □	0.8±0.15	2000	1.00	200
CIM 10K 252 N □	0.8±0.15	2500	1.20	200
CIM 10N 700 N □	0.8±0.15	70	0.30	500
CIM 10N 121 N □	0.8±0.15	120	0.45	400
CIM 10N 241 N □	0.8±0.15	240	0.60	300
CIM 10F 470 N □	0.8±0.15	47	0.25	550
CIM 10F 600 N □	0.8±0.15	60	0.25	550
CIM 10F 121 N □	0.8±0.15	120	0.30	500
CIM 10F 331 N □	0.8±0.15	330	0.58	400
CIM 10F 471 N □	0.8±0.15	470	0.85	300

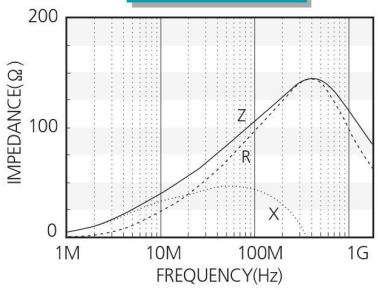
※Test equipment : Agilent E4991A +16193A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

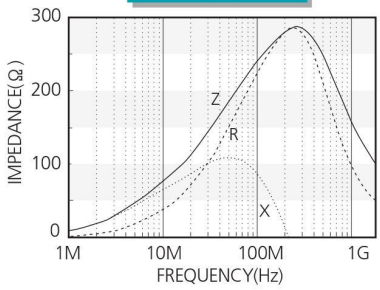
CIM10U800



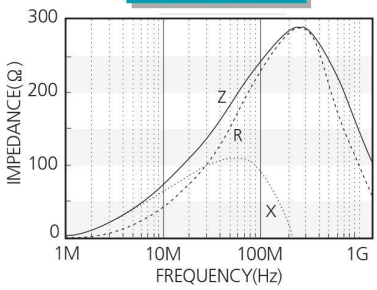
CIM10U121



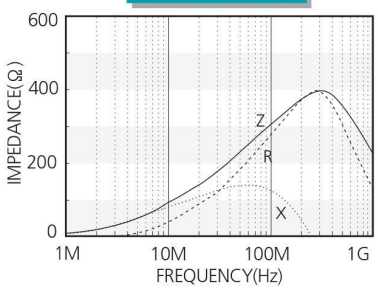
CIM10U221



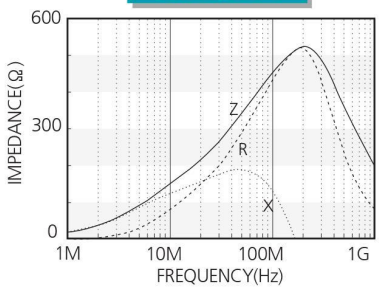
CIM10U241



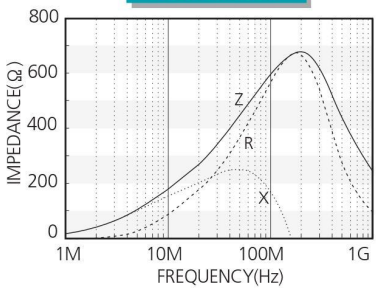
CIM10U301



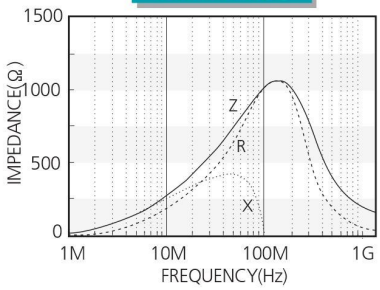
CIM10U471



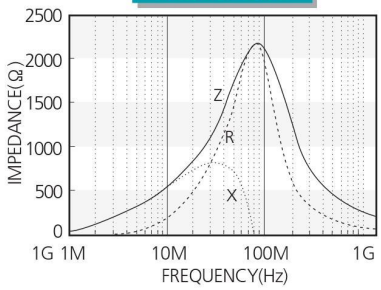
CIM10U601



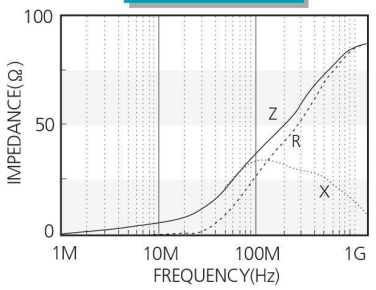
CIM10U102



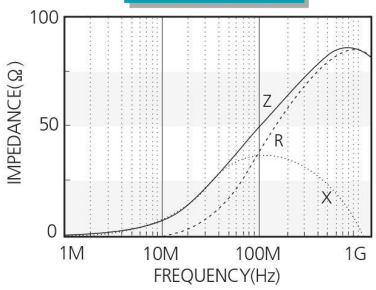
CIM10U202



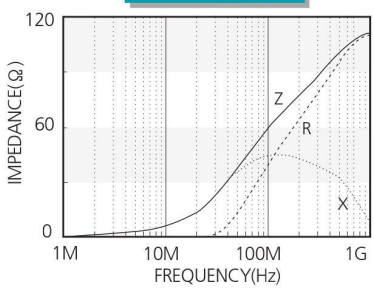
CIM10J400



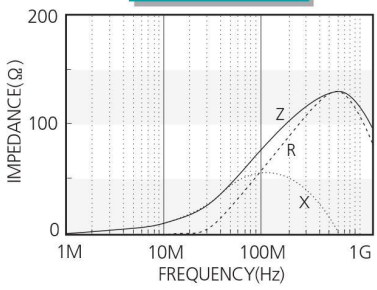
CIM10J470



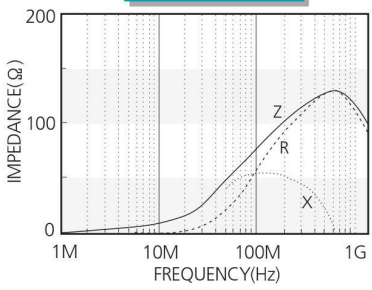
CIM10J600



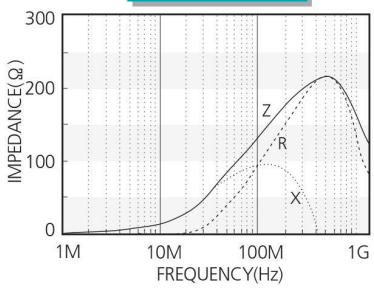
CIM10J750



CIM10J800

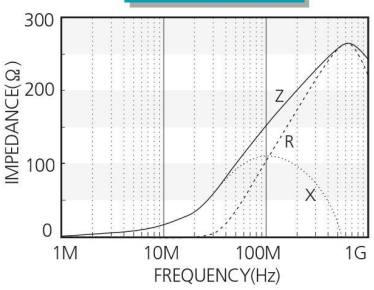


CIM10J121

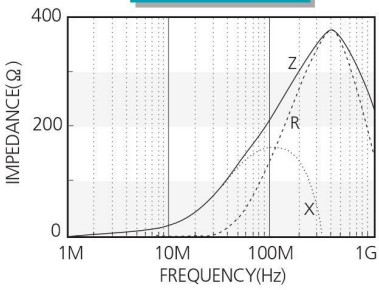


Electrical Characteristics

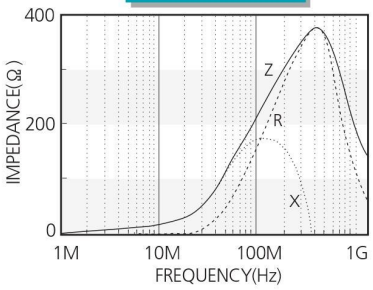
CIM10J151



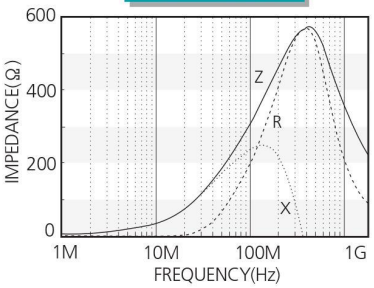
CIM10J221



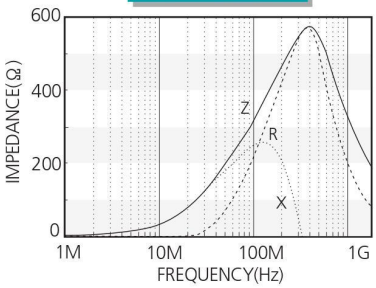
CIM10J241



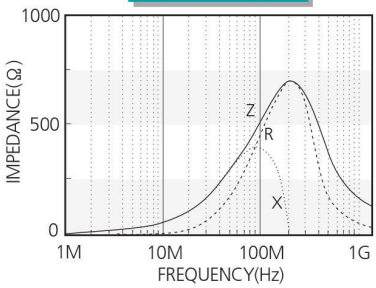
CIM10J301



CIM10J331



CIM10J471



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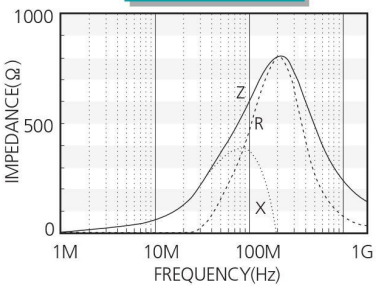
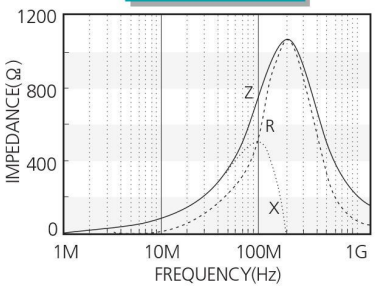
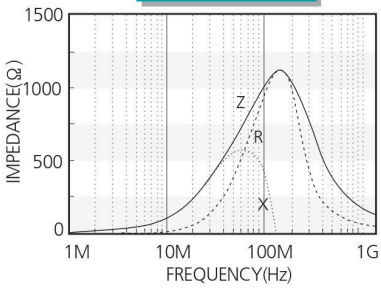


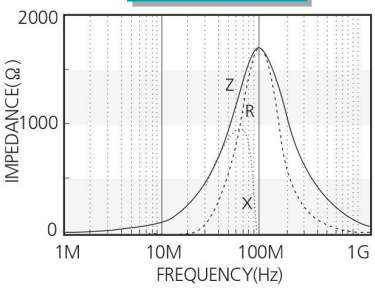
CIM10J751



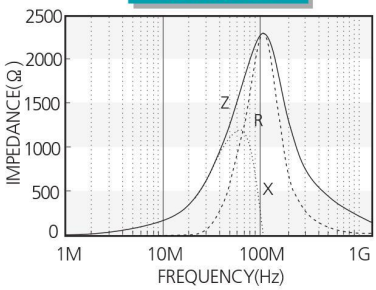
CIM10J102



CIM10J152

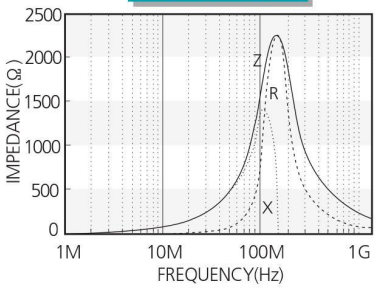


CIM10J252



Electrical Characteristics

CIM10K152



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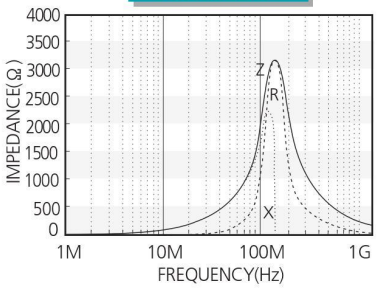

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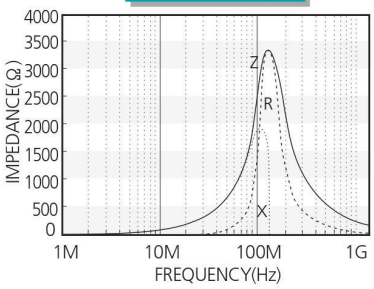

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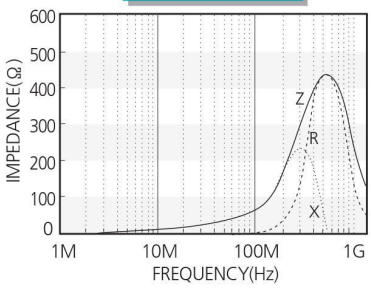
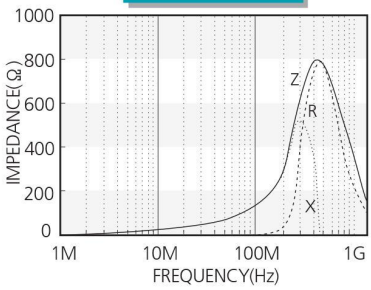
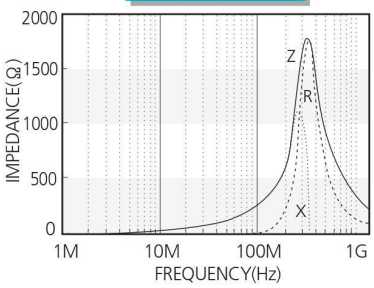


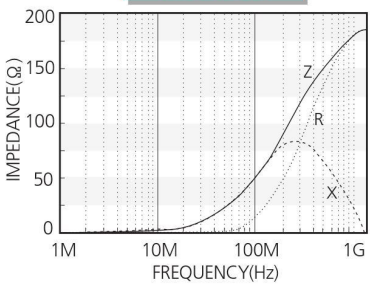
CIM10N121



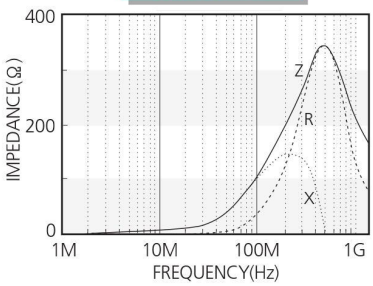
CIM10N241



CIM10F600



CIM10F121



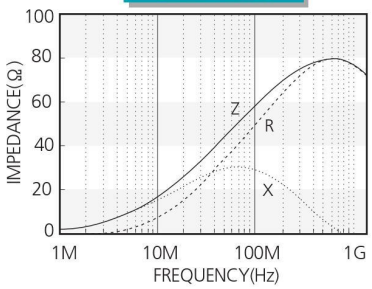
CIM 2012(0805) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIM 21U 800 N □	0.9±0.2	80	0.10	900
CIM 21U 101 N □	0.9±0.2	100	0.10	800
CIM 21U 121 N □	0.9±0.2	120	0.10	800
CIM 21U 151 N □	0.9±0.2	150	0.15	600
CIM 21U 241 N □	0.9±0.2	240	0.15	600
CIM 21U 301 N □	0.9±0.2	300	0.15	500
CIM 21U 471 N □	0.9±0.2	470	0.30	500
CIM 21U 601 N □	0.9±0.2	600	0.30	500
CIM 21U 102 N □	0.9±0.2	1000(at 70MHz)	0.40	500
CIM 21U 202 N □	0.9±0.2	2000(at 70MHz)	0.70	300
CIM 21J 600 N □	0.9±0.2	60	0.08	900
CIM 21J 800 N □	0.9±0.2	80	0.08	1000
CIM 21J 121 N □	0.9±0.2	120	0.15	800
CIM 21J 151 N □	0.9±0.2	150	0.15	500
CIM 21J 221 N □	0.9±0.2	220	0.20	500
CIM 21J 241 N □	0.9±0.2	240	0.20	500
CIM 21J 301 N □	0.9±0.2	300	0.20	500
CIM 21J 471 N □	0.9±0.2	470	0.25	500
CIM 21J 601 N □	0.9±0.2	600	0.25	500
CIM 21J 751 N □	0.9±0.2	750	0.35	400
CIM 21J 102 N □	0.9±0.2	1000	0.35	500
CIM 21J 152 N □	0.9±0.2	1500(at 70MHz)	0.45	500
CIM 21J 182 N □	0.9±0.2	1800(at 70MHz)	0.45	500
CIM 21J 202 N □	0.9±0.2	2000(at 70MHz)	0.50	500
CIM 21J 222 N □	0.9±0.2	2200(at 70MHz)	0.70	300
CIM 21J 252 N □	0.9±0.2	2500(at 50MHz)	0.70	300
CIM 21J 302 N □	0.9±0.2	3000(at 50MHz)	0.60	300
CIM 21K 152 N □	0.9±0.2	1500	0.45	300
CIM 21K 252 N □	0.9±0.2	2500	0.80	250
CIM 21N 560 N □	0.9±0.2	56	0.20	600
CIM 21N 700 N □	0.9±0.2	70	0.20	600
CIM 21N 121 N □	0.9±0.2	120	0.25	500
CIM 21N 241 N □	0.9±0.2	240	0.30	400

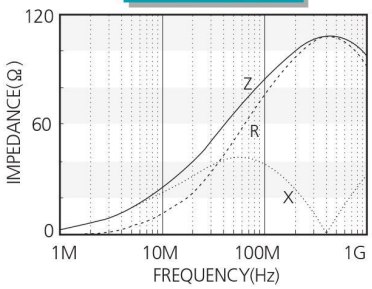
※Test equipment : Agilent E4991A +16193A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 20℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

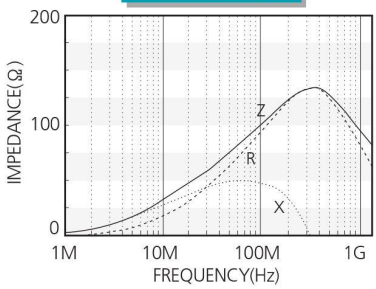
CIM21U600



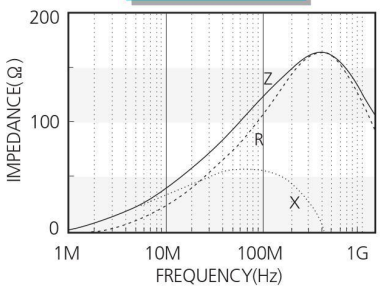
CIM21U800



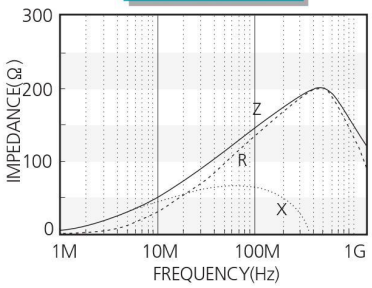
CIM21U101



CIM21U121



CIM21U151



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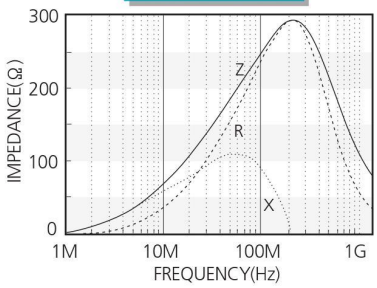

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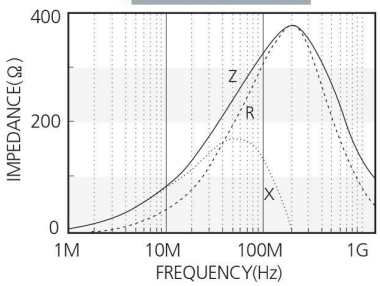
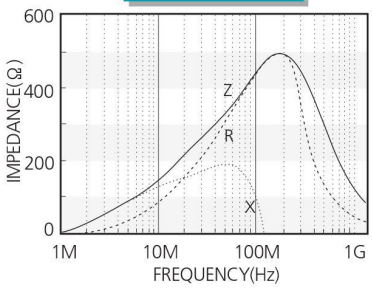


CIM21U471



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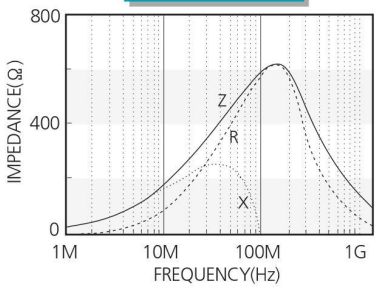

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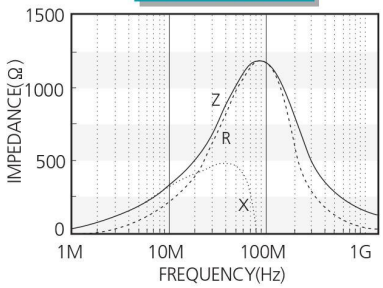
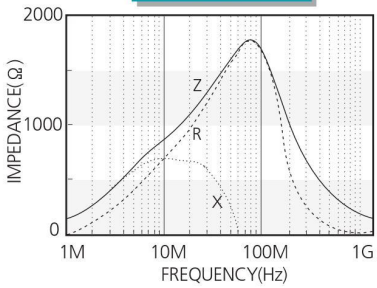
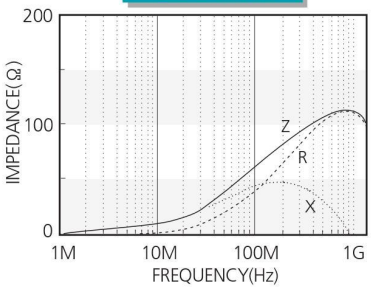


CIM21U202



Electrical Characteristics

CIM21J600



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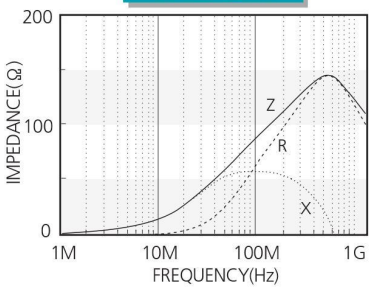
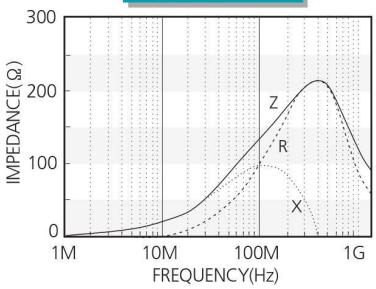


CIM21J121



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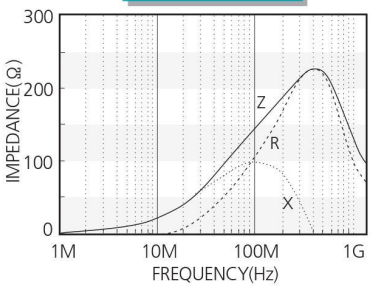

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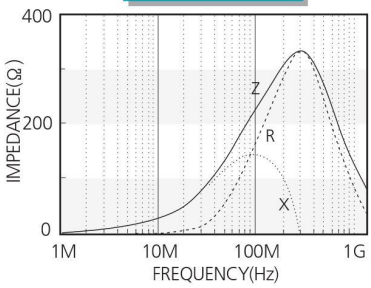
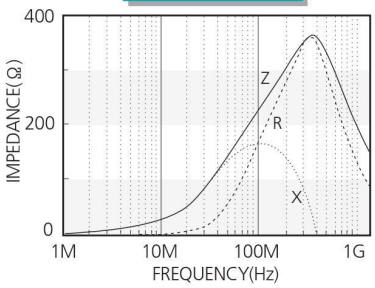


CIM21J241



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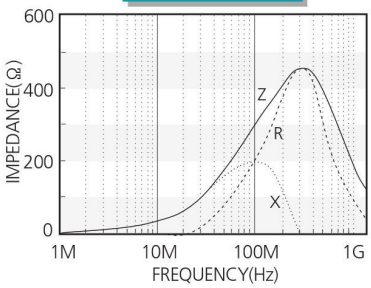

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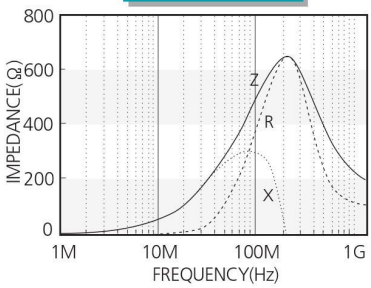

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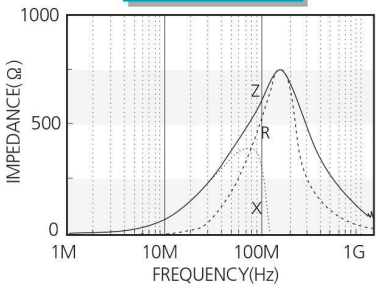

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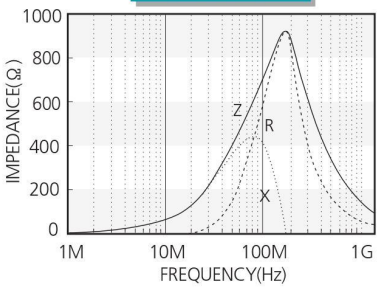

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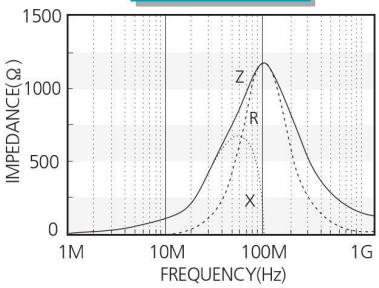
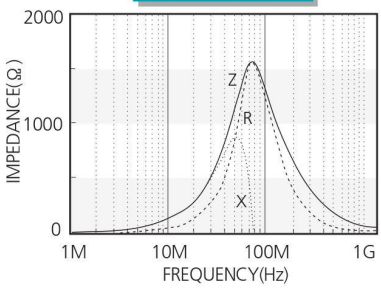
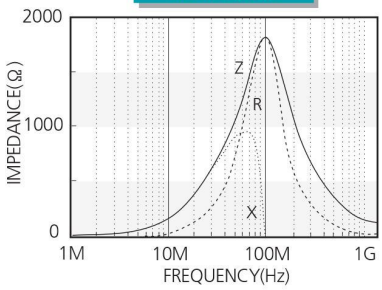


CIM21J152



Electrical Characteristics

CIM21J182



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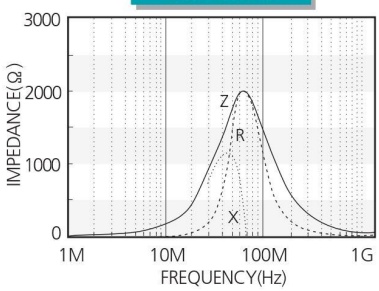

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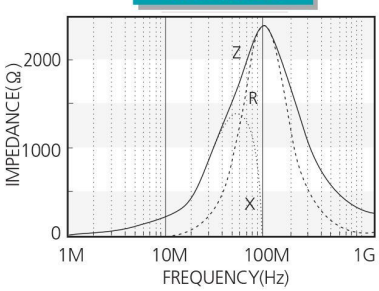

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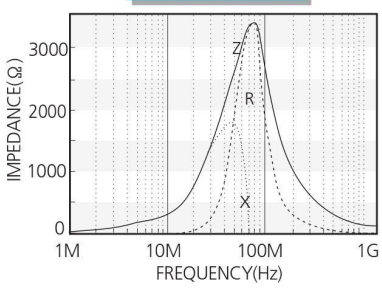

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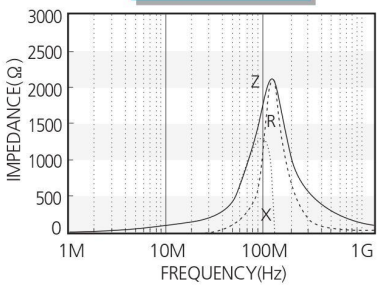

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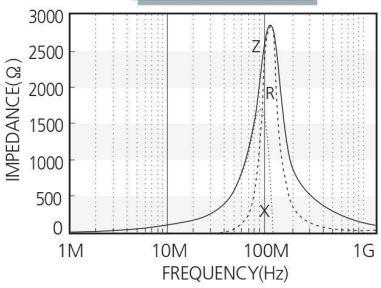
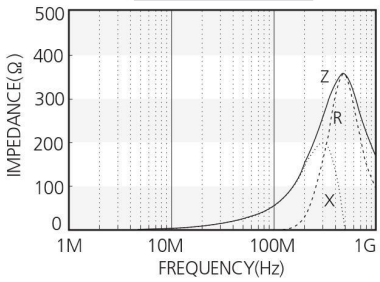


CIM21N560



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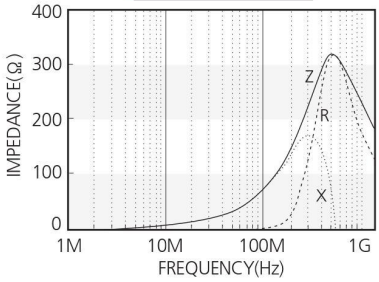
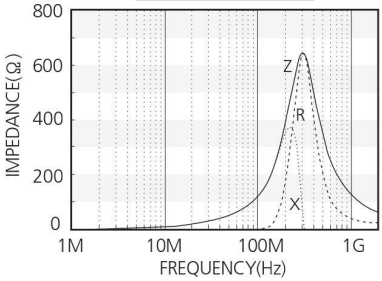


CIM21N121



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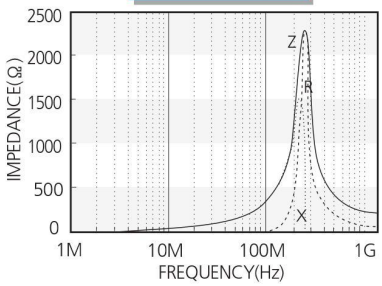


Feature

- The smallest beads used for high current.

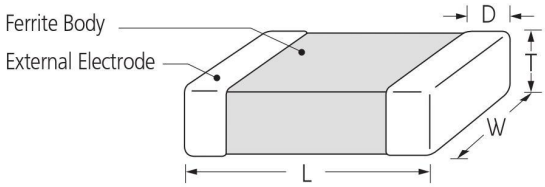
Application

- Suppression of noise in power line

The CIC/CIS Series can be used in high current owing to their low DC resistance.
They can match power lines to a maximum of 6A DC.

Operating Temp	-55~+125℃
Storage Temp (After mounting)	-55~+125℃

Dimensions



Series	Dimension (mm)			
	L	W	T	D
CIC/CIS02	0.40±0.02	0.20±0.02	0.20±0.02	0.10+0.04/−0.03
CIC/CIS03	0.60±0.03	0.30±0.03	0.30±0.03	0.15±0.05
CIC/CIS05	1.00±0.05	0.50±0.05	0.50±0.05	0.25±0.10
CIC/CIS10	1.60±0.15	0.80±0.15	0.80±0.15	0.30±0.20
CIC/CIS21	2.00±0.20	1.25±0.20	0.90±0.20	0.50+0.20/−0.30

Part Numbering

CI	C	05	P	300	N	C
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Product ID (Chip Beads)
(2) Type (C : For high current ~3A, S : Ultra high current ~6A)
(3) Dimension (03 : 0.6mm x 0.3mm, 05 : 1.0mm x 0.5mm, etc.)
(4) Characteristic
(J, W, Y : Noise suppression in the 100~300MHz range, P : High current in broad band,
U : Broad impedance, especially suppresses noise in the 10~200MHz range, etc.)
(5) Nominal impedance (110 : 11Ω, 121 : 120Ω)
(6) Thickness option (N: Standard)
(7) Packaging (E : Embossed tape, 7" Reel / C : Paper tape, 7" Reel)

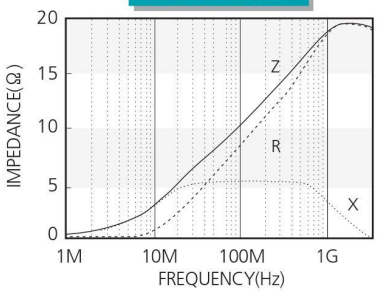
CIC 0402(01005) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIC 02U 100 N □	0.20±0.02	10(typ.)	0.07	750
CIC 02U 700 N □	0.20±0.02	70	0.37	300
CIC 02U 121 N □	0.20±0.02	120	0.50	250
CIC 02U 241 N □	0.20±0.02	240	0.90	200
CIC 02W 100 N □	0.20±0.02	10(typ.)	0.10	500
CIC 02W 700 N □	0.20±0.02	70	0.45	260
CIC 02W 121 N □	0.20±0.02	120	0.60	220
CIC 02W 151 N □	0.20±0.02	150	0.65	200
CIC 02W 181 N □	0.20±0.02	180	0.75	200

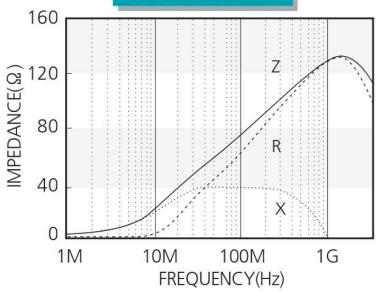
※Test equipment: Agilent E4991A +16197A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

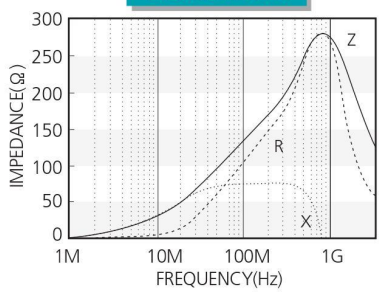
CIC02U100NC



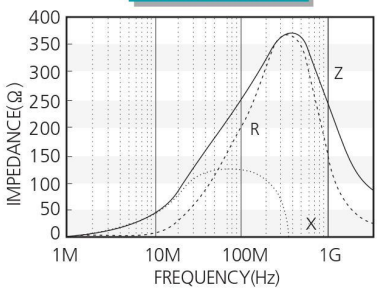
CIC02U700NC



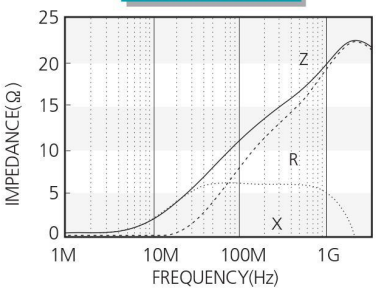
CIC02U121NC



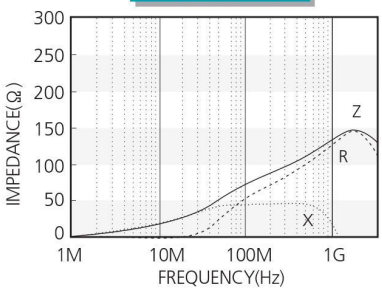
CIC02U241NC



CIC02W100NC



CIC02W700NC



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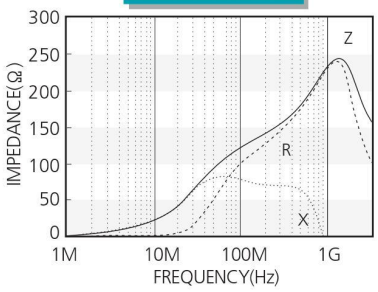
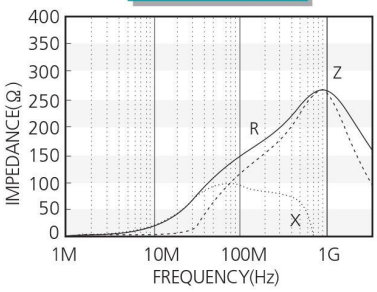
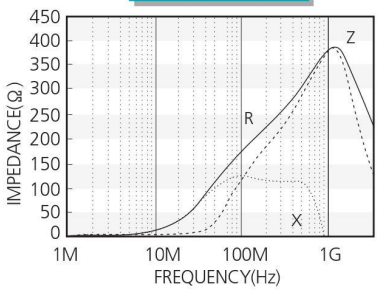


CIC02W151NC



CIC02W181NC

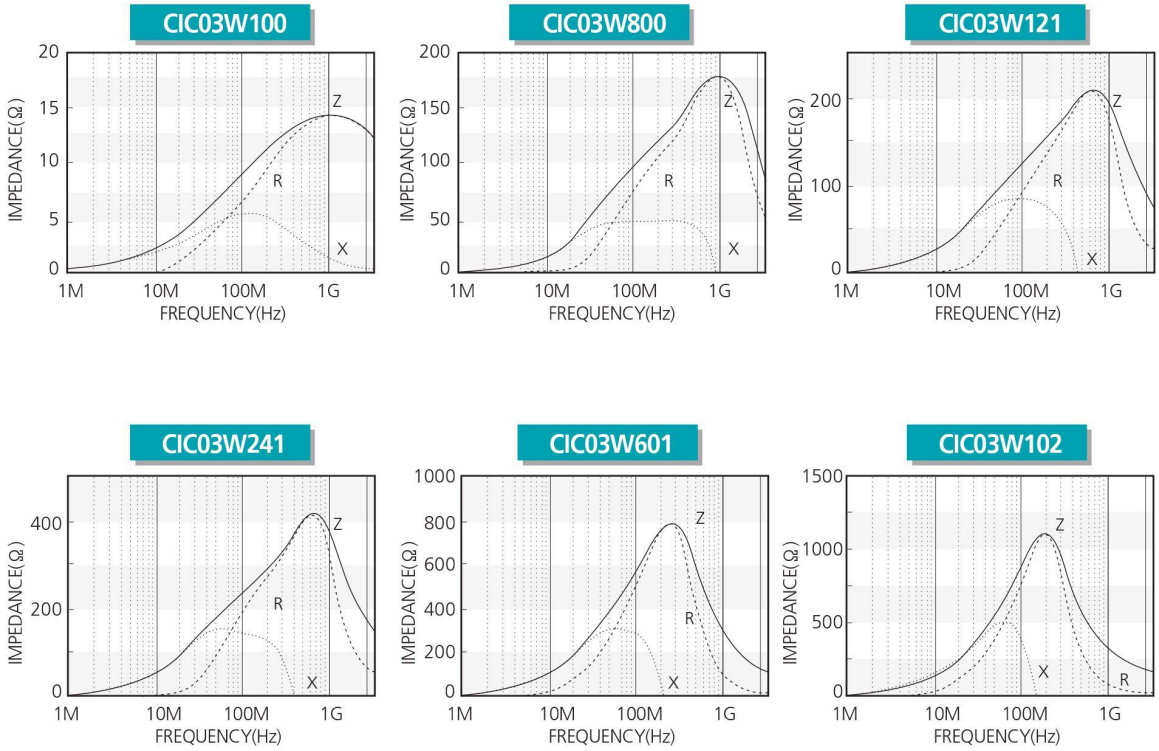


CIC 0603(0201) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIC 03W 100 N □	0.30±0.03	10(typ.)	0.05	1000
CIC 03W 800 N □	0.30±0.03	80	0.18	500
CIC 03W 121 N □	0.30±0.03	120	0.23	450
CIC 03W 241 N □	0.30±0.03	240	0.38	350
CIC 03W 601 N □	0.30±0.03	600	0.85	250
CIC 03W 102 N □	0.30±0.03	1000	1.25	200

※Test equipment : Agilent E4991A +16197A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics



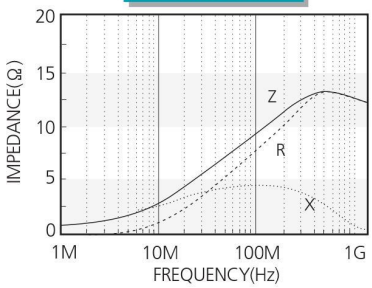
CIC 1005(0402) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIC 05P 100 N □	0.50±0.05	10(typ.)	0.015	1750
CIC 05P 300 N □	0.50±0.05	30	0.06	1100
CIC 05P 700 N □	0.50±0.05	70	0.10	700
CIC 05P 121 N □	0.50±0.05	120	0.13	700
CIC 05P 221 N □	0.50±0.05	220	0.18	600
CIC 05P 471 N □	0.50±0.05	470	0.30	500
CIC 05P 601 N □	0.50±0.05	600	0.34	420
CIC 05P 102 N □	0.50±0.05	1000	0.49	350
CIC 05J 600 N □	0.50±0.05	60	0.09	1500
CIC 05Y 100 N □	0.50±0.05	10(typ.)	0.035	2200
CIC 05Y 300 N □	0.50±0.05	30	0.035	2200
CIC 05Y 600 N □	0.50±0.05	60	0.06	1700
CIC 05Y 800 N □	0.50±0.05	80	0.07	1500
CIC 05Y 101 N □	0.50±0.05	100	0.07	1500
CIC 05Y 121 N □	0.50±0.05	120	0.09	1300

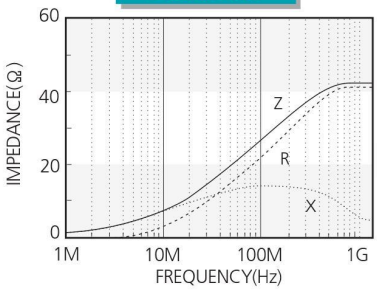
※Test equipment: Agilent E4991A +16192A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

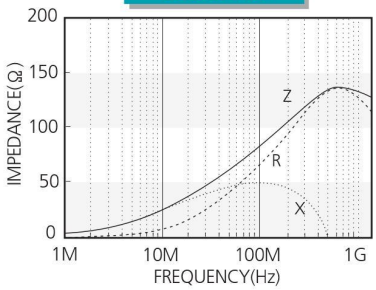
CIC05P100



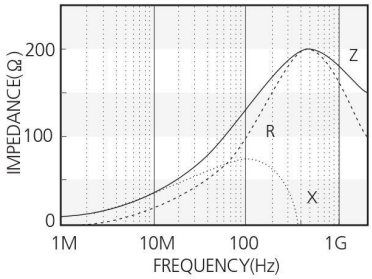
CIC05P300



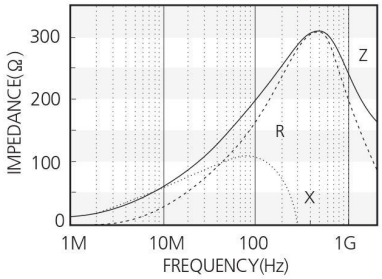
CIC05P700



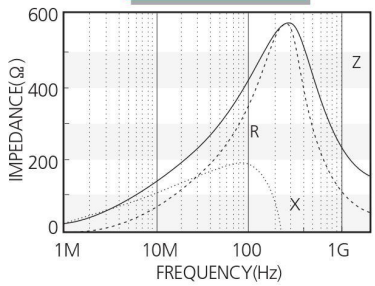
CIC05P121



CIC05P221

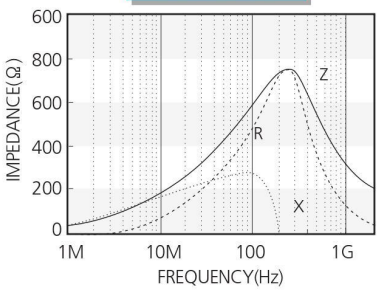


CIC05P471

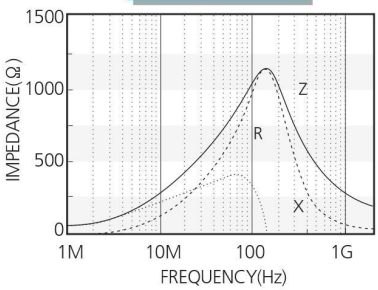


Electrical Characteristics

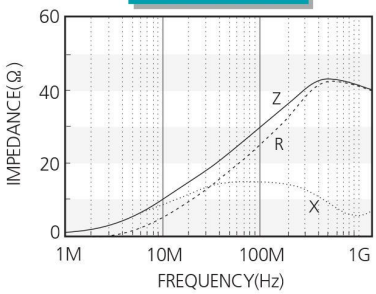
CIC05P601



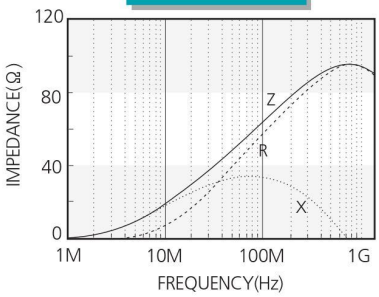
CIC05P102



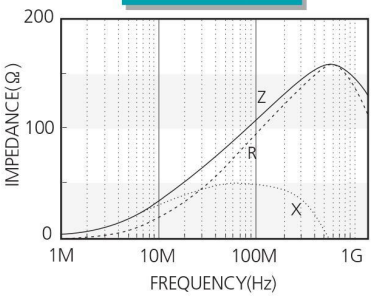
CIC05P300



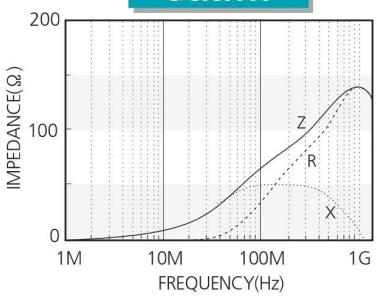
CIC05P600



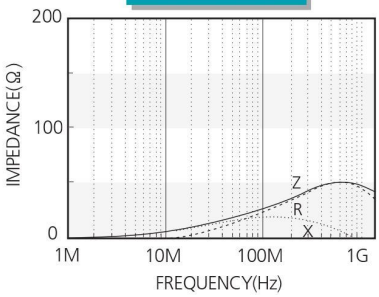
CIC05P121



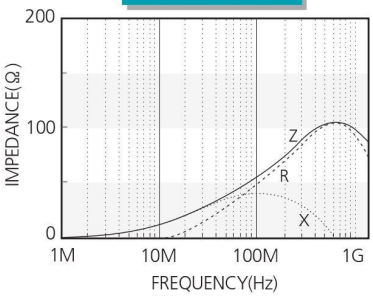
CIC05J600



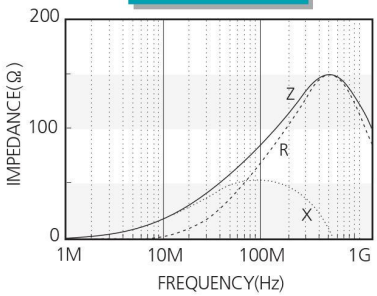
CIC05Y300



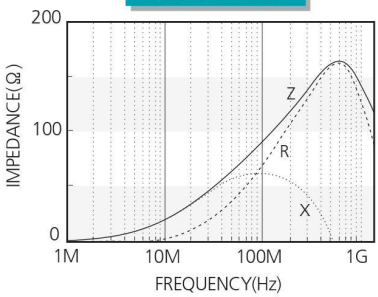
CIC05Y600



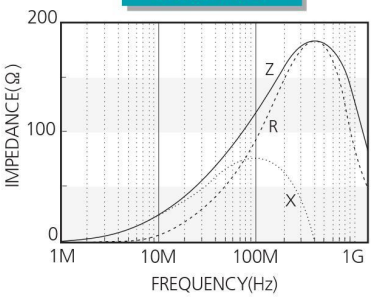
CIC05Y800



CIC05Y101



CIC05Y121



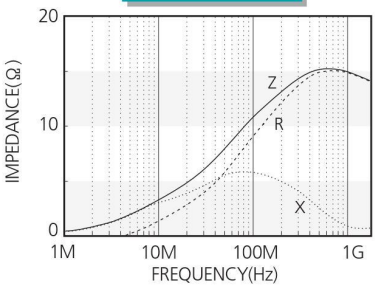
CIC 1608(0603) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIC 10P 080 N □	0.8 ± 0.15	8(typ.)	0.03	3000
CIC 10P 220 N □	0.8 ± 0.15	22	0.025	3000
CIC 10P 300 N □	0.8 ± 0.15	30	0.025	3000
CIC 10P 330 N □	0.8 ± 0.15	33	0.025	3000
CIC 10P 600 N □	0.8 ± 0.15	60	0.05	2500
CIC 10P 800 N □	0.8 ± 0.15	80	0.05	2000
CIC 10P 101 N □	0.8 ± 0.15	100	0.05	2000
CIC 10P 121 N □	0.8 ± 0.15	120	0.05	2000
CIC 10P 151 N □	0.8 ± 0.15	150	0.09	1500
CIC 10P 181 N □	0.8 ± 0.15	180	0.09	1500
CIC 10P 221 N □	0.8 ± 0.15	220	0.10	1400
CIC 10P 301 N □	0.8 ± 0.15	300	0.12	1200
CIC 10P 331 N □	0.8 ± 0.15	330	0.14	1200
CIC 10P 471 N □	0.8 ± 0.15	470	0.15	1200
CIC 10P 601 N □	0.8 ± 0.15	600	0.15	1200
CIC 10J 080 N □	0.8 ± 0.15	8(typ.)	0.02	3000
CIC 10J 300 N □	0.8 ± 0.15	30	0.03	3000
CIC 10J 470 N □	0.8 ± 0.15	47	0.05	2000
CIC 10J 600 N □	0.8 ± 0.15	60	0.05	2000
CIC 10J 800 N □	0.8 ± 0.15	80	0.10	2000
CIC 10J 121 N □	0.8 ± 0.15	120	0.10	2000
CIC 10J 151 N □	0.8 ± 0.15	150	0.15	1500
CIC 10J 221 N □	0.8 ± 0.15	220	0.15	1500
CIC 10J 301 N □	0.8 ± 0.15	300	0.15	800
CIC 10J 471 N □	0.8 ± 0.15	470	0.15	800
CIC 10J 601 N □	0.8 ± 0.15	600	0.15	750

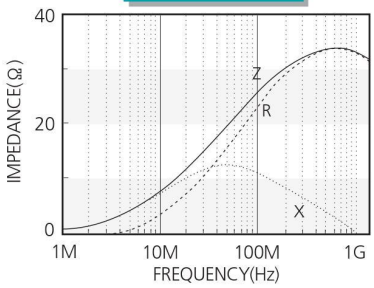
※ Test equipment : Agilent E4991A +16193A or Equivalent
※ Rated Current : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

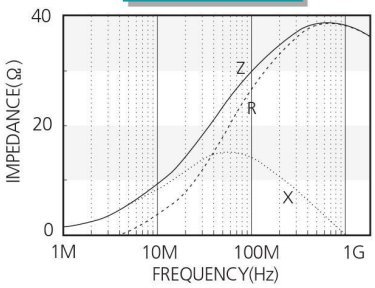
CIC10P080



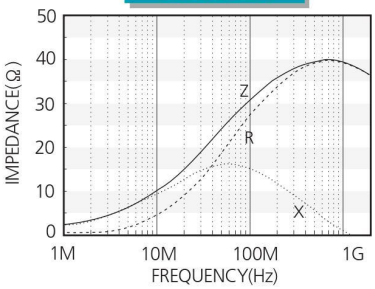
CIC10P220



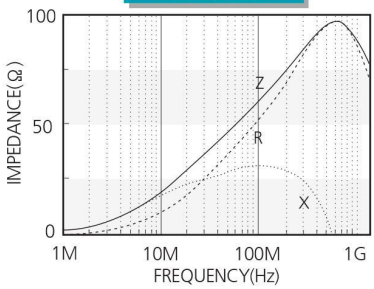
CIC10P300



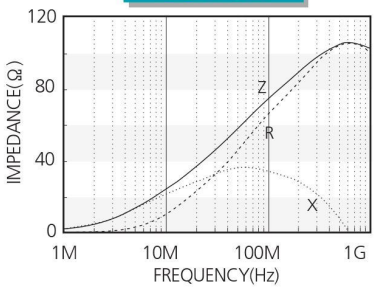
CIC10P330



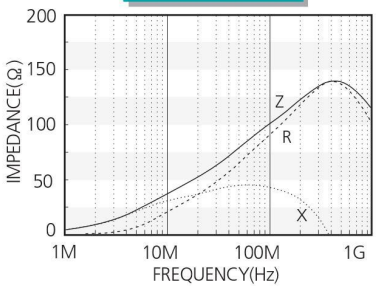
CIC10P600



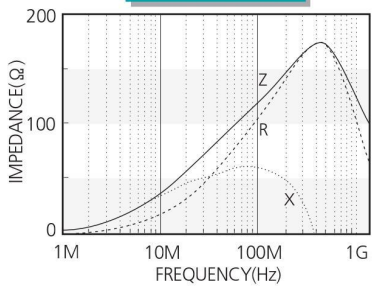
CIC10P800



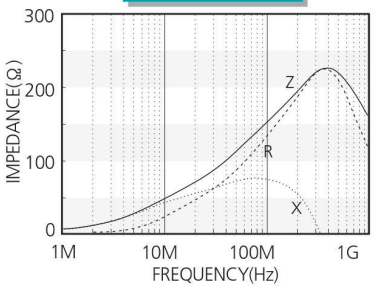
CIC10P101



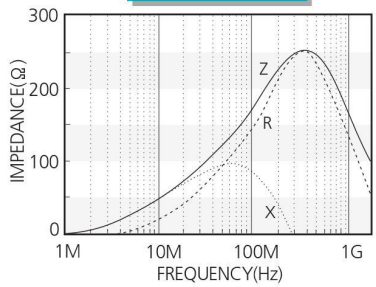
CIC10P121



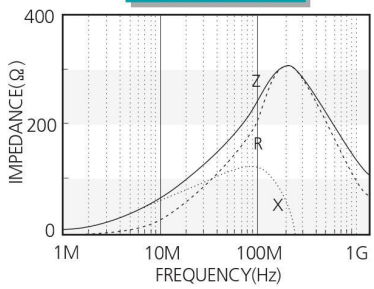
CIC10P151



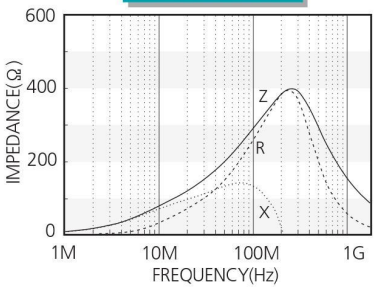
CIC10P181



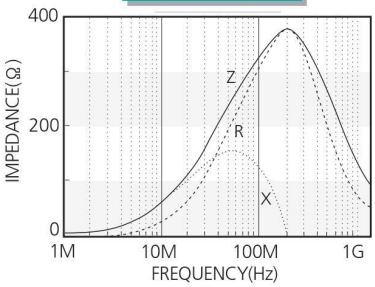
CIC10P221



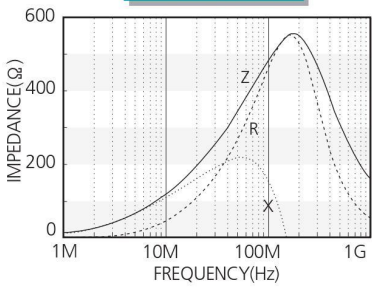
CIC10P301



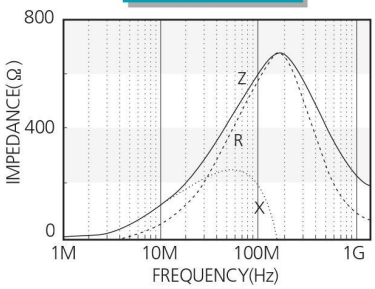
CIC10P331



CIC10P471

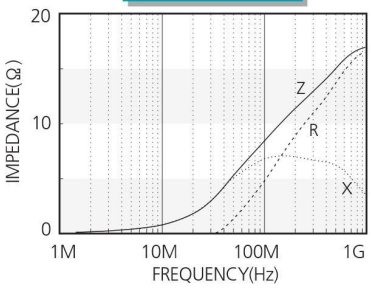


CIC10P601

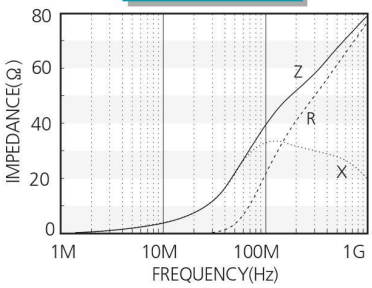


Electrical Characteristics

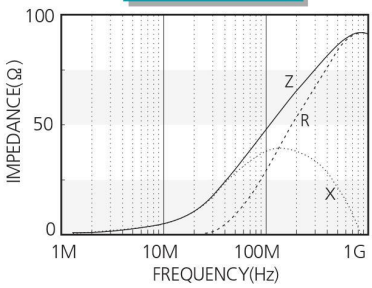
CIC10J080



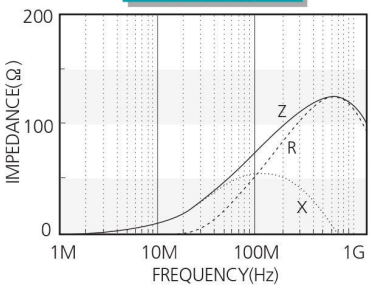
CIC10J300



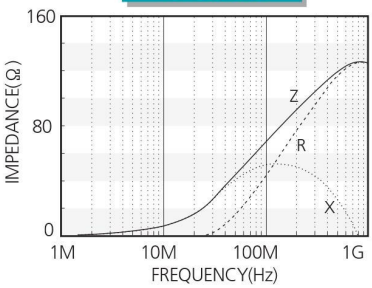
CIC10J470



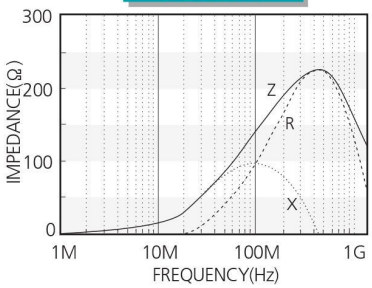
CIC10J600



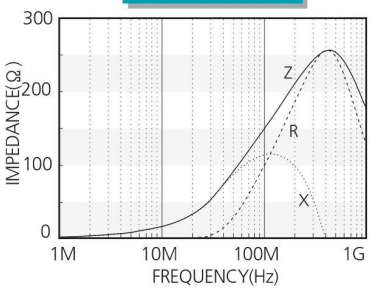
CIC10J800



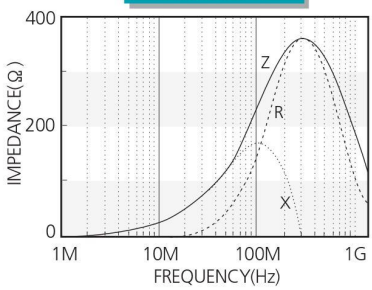
CIC10J121



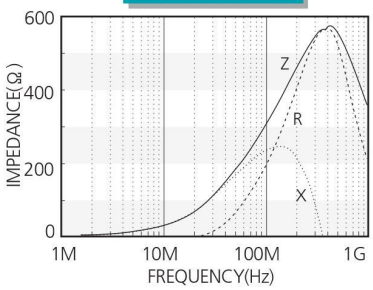
CIC10J151



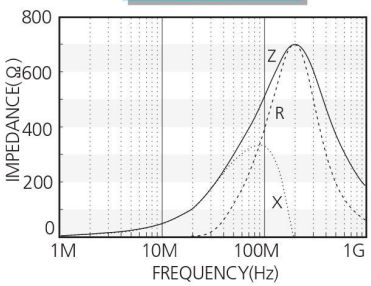
CIC10J221



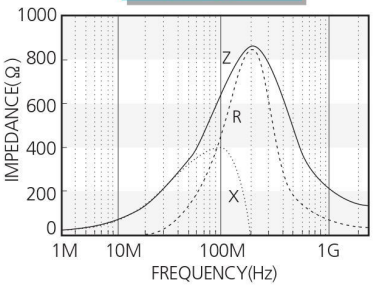
CIC10J301



CIC10J471



CIC10J601



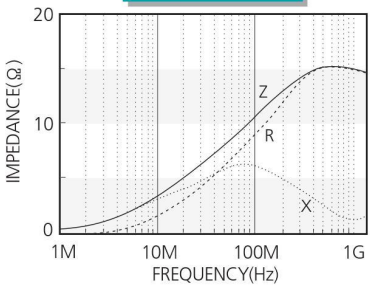
CIC 2012(0805) Type

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIC 21P 110 N □	0.90±0.2	11(typ.)	0.05	6000
CIC 21P 300 N □	0.90±0.2	30	0.015	3000
CIC 21P 600 N □	0.90±0.2	60	0.025	3000
CIC 21P 800 N □	0.90±0.2	80	0.025	2500
CIC 21P 101 N □	0.90±0.2	100	0.02	2000
CIC 21P 121 N □	0.90±0.2	120	0.05	2000
CIC 21P 221 N □	0.90±0.2	220	0.035	3200
CIC 21P 331 N □	0.85±0.2	330	0.05	2000
CIC 21P 601 N □	0.90±0.2	600	0.15	1000
CIC 21J 600 N □	0.90±0.2	60	0.03	3800
CIC 21J 121 N □	0.90±0.2	120	0.05	2500
CIC 21J 221 N □	0.90±0.2	220	0.05	1500
CIC 21J 301 N □	0.90±0.2	300	0.10	1500
CIC 21J 471 N □	0.90±0.2	470	0.08	1500
CIC 21J 601 N □	0.90±0.2	600	0.10	1000

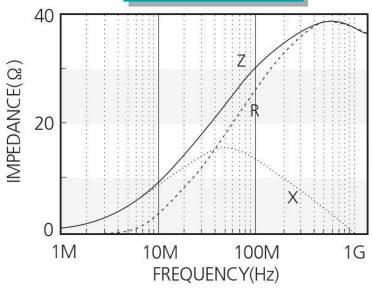
※Test equipment : Agilent E4991A +16193A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 40℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

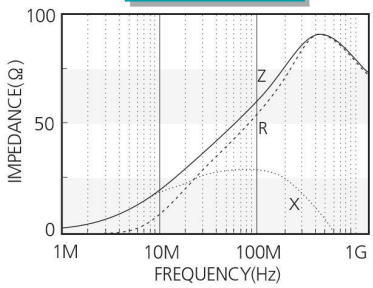
CIC21P110



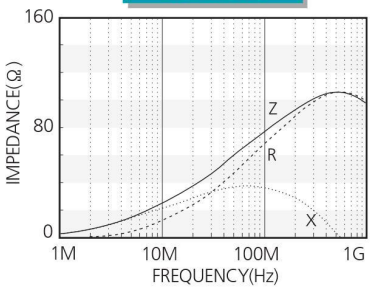
CIC21P300



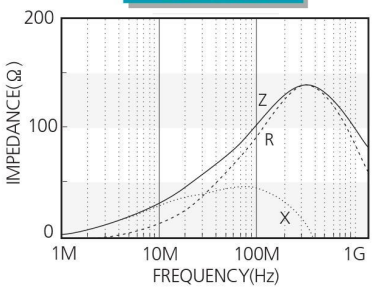
CIC21P600



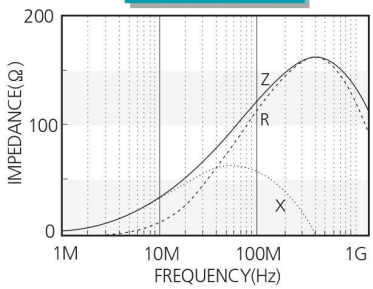
CIC21P800



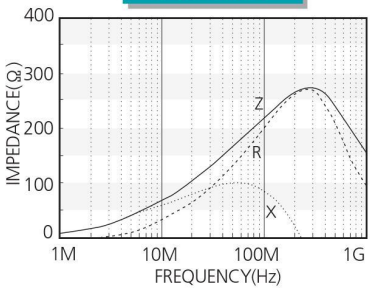
CIC21P101



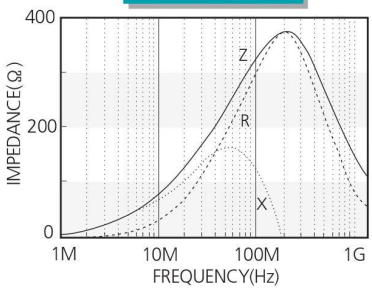
CIC21P121



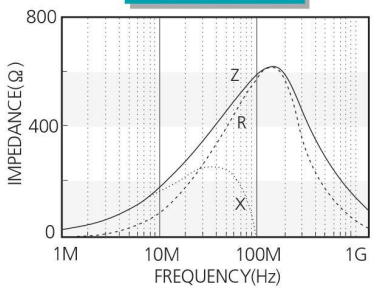
CIC21P221



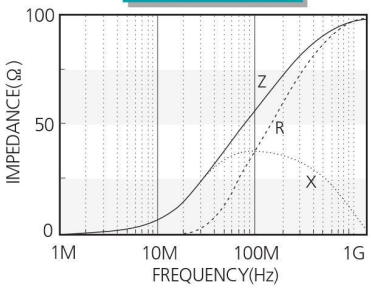
CIC21P331



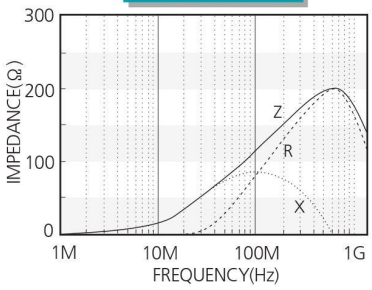
CIC21P601



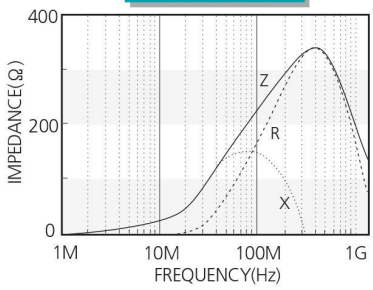
CIC21J600



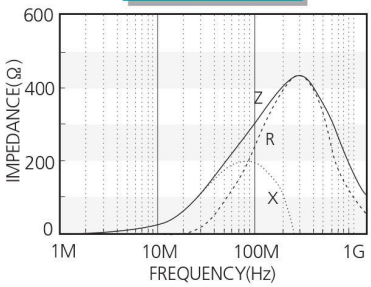
CIC21J121



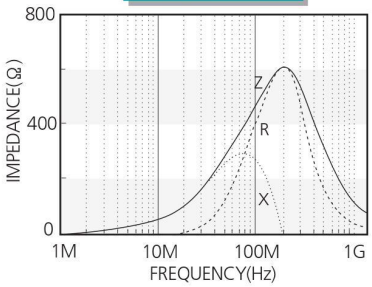
CIC21J221



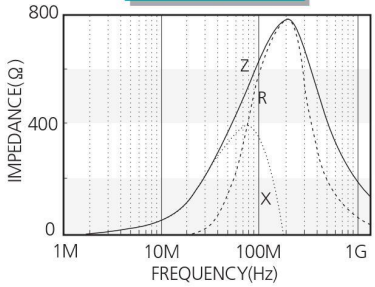
CIC21J301



CIC21J471



CIC21J601

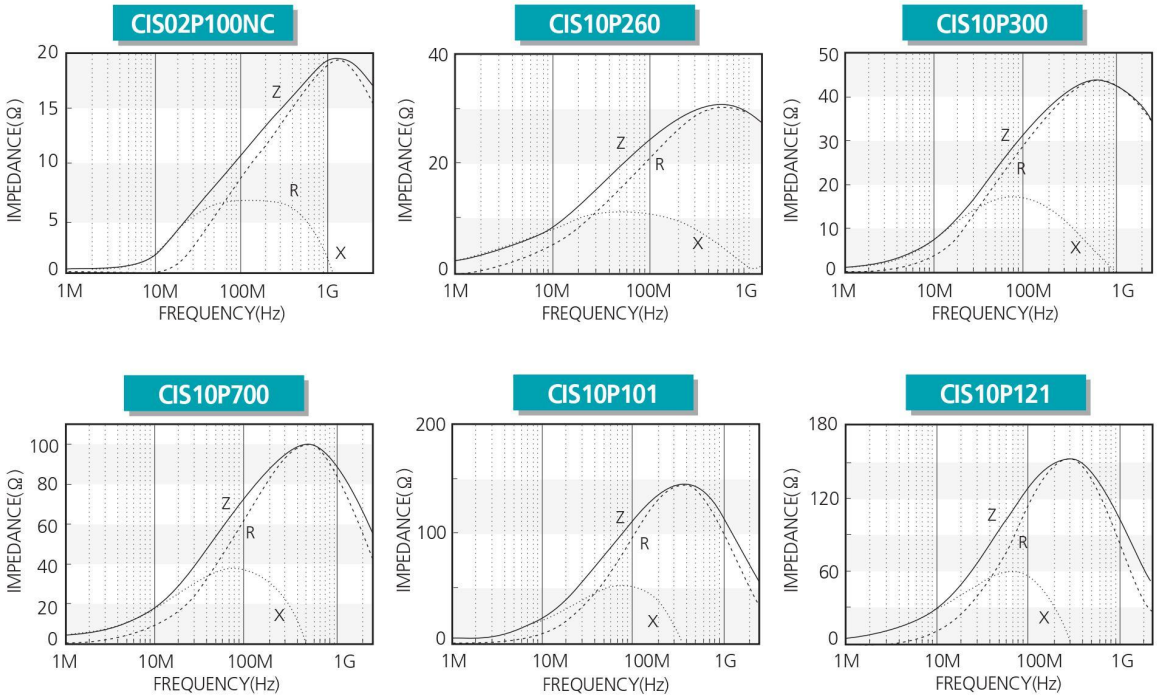


CIS Series

Part No.	Thickness (mm)	Impedance (Ω)±25% @100 MHz	DC Resistance (Ω) Max.	Rated Current (mA) Max.
CIS 02P 100 N□	0.20±0.02	10(typ.)	0.045	1000
CIS 10P 260 A□	0.60±0.15	26	0.007	6000
CIS 10P 300 A□	0.60±0.15	30	0.001	6000
CIS 10P 700 A□	0.60±0.15	70	0.002	4000
CIS 10P 101 A□	0.60±0.15	100	0.003	3000
CIS 10P 121 A□	0.60±0.15	120	0.003	3000
CIS 10P 181 A□	0.60±0.15	180	0.004	2500
CIS 10P 221 N□	0.80±0.15	220	0.005	2500
CIS 10P 301 N□	0.80±0.15	300	0.007	2000
CIS 10P 331 N□	0.80±0.15	330	0.007	1700
CIS 10P 391 N□	0.80±0.15	390	0.100	1200
CIS 10P 471 N□	0.80±0.15	470	0.130	1500
CIS 10P 601 N□	0.80±0.15	600	0.150	1300
CIS 10J 300 N□	0.80±0.15	30	0.010	6000
CIS 21P 300 N□	0.90±0.20	30	0.010	6000
CIS 21P 101 N□	0.90±0.20	100	0.020	4000
CIS 21J 121 N□	0.90±0.20	120	0.020	5000

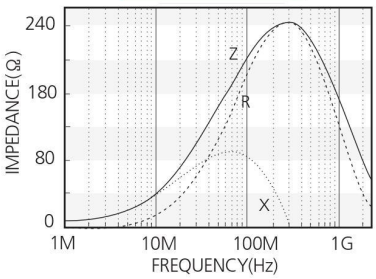
※Test equipment: Agilent E4991A +16193A or Equivalent
※Rated Current : DC current value when the temperature of inductor rises to 60℃ by self heating (Reference ambient temperature:25℃)

Electrical Characteristics

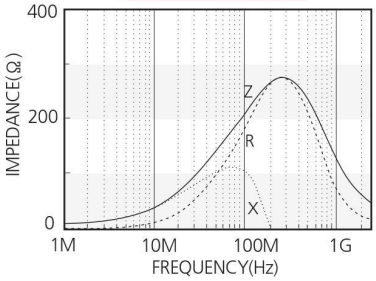


Electrical Characteristics

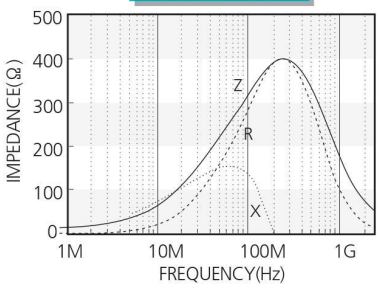
CIS10P181



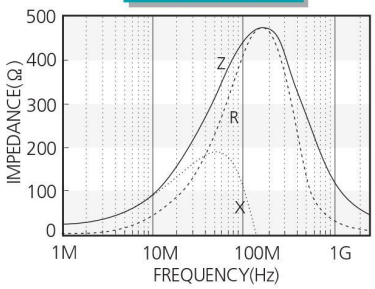
CIS10P221



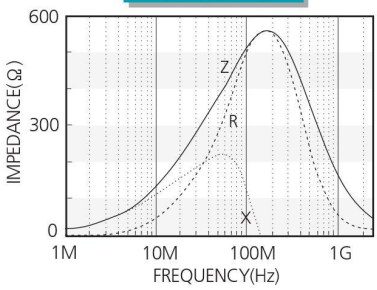
CIS10P331



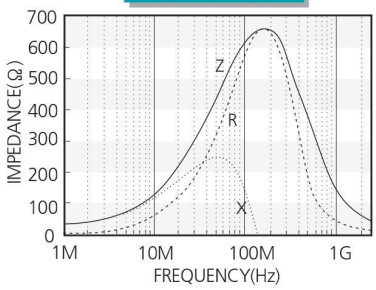
CIS10P391



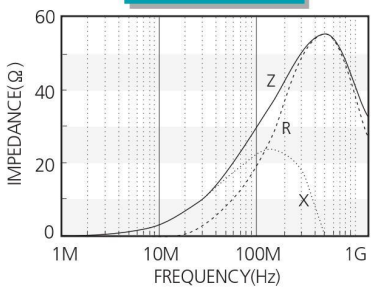
CIS10P471



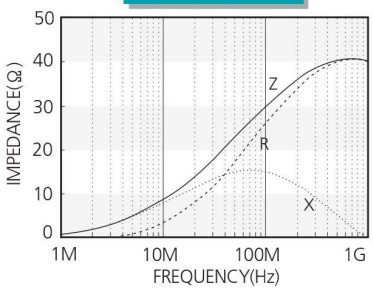
CIS10P601



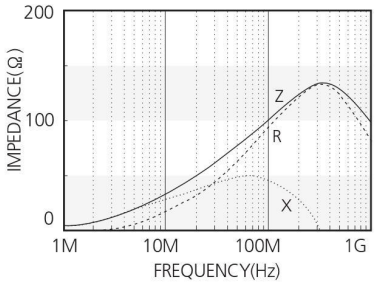
CIS10J300



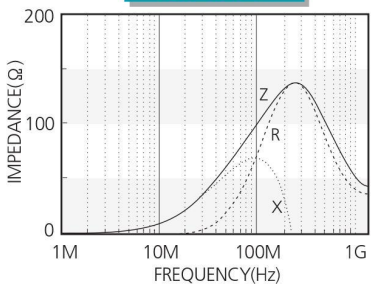
CIS21P300



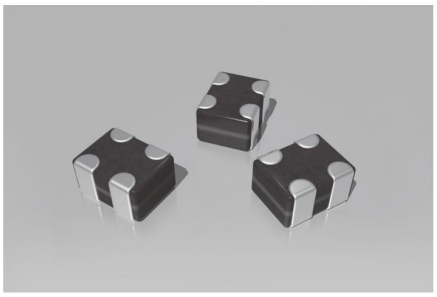
CIS21P101



CIS21J121



Common Mode Filter



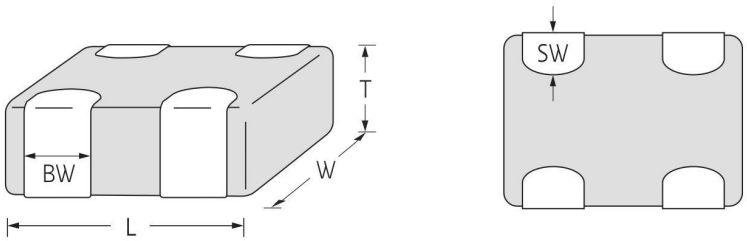
Features

- A compact film type common mode filter
- Low DC resistance
- Free of all RoHS-regulated substances

Application

- High speed interface such as LVDS, IEEE1394, USB 2.0, MIPI, S-ata2, etc.

Dimensions



Series	Dimension (mm)				
	L	W	T	BW	SW
CMFP080604	0.85±0.05	0.65±0.05	0.45±0.05	0.25±0.10	0.15±0.05
CMFP060503	0.65±0.05	0.50±0.05	0.30±0.05	0.15±0.10	0.10±0.05

Part Numbering

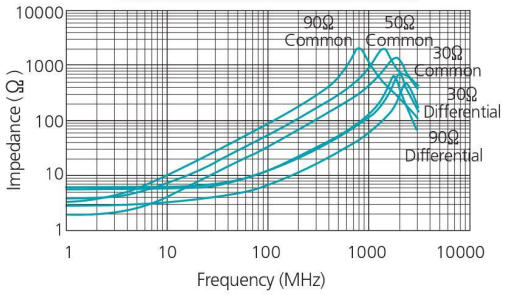
CMF	P	0806	04	GN	900	M	N	C
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

(1) Product ID (CMF : Common Mode Filter)
(2) Type (P : Plating Type)
(3) Dimension (0806 : 0.85mm x 0.65 mm, 0605 : 0.65mm x 0.50mm)
(4) Thickness (03 : 0.30mm, 04 : 0.45mm)
(5) Characteristic (GN : General Speed ,HN : High speed)
(6) Impedance (900 : 90 ohm)
(7) Tolerance (N : ±30%, M : ±20%)
(8) Termination Type (N : Normal termination)
(9) Packaging Type (C : Paper type, 7" Reel)

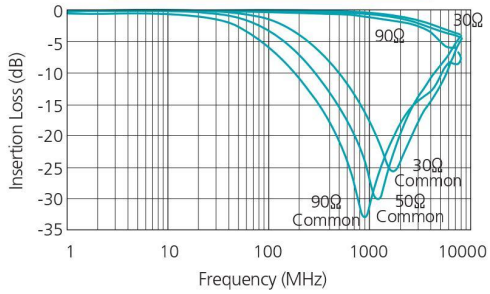
CMFP080604GN Series

Part No.	Common Mode Impedance(Ω) @100MHz	DC Resistance(Ω) [1 line]	Rated Current (mA) Max.	Rated Voltage(V) Max.	Insulation Resistance (MΩ) Min.
CMFP080604GN900MNC	90	3.9 Max.	100	5	10
CMFP080604GN500MNC	50	3.2 Max.	100	5	10
CMFP080604GN300NNC	30	1.9 Max.	100	5	10

Impedance vs. Frequency Characteristics(Typ.)



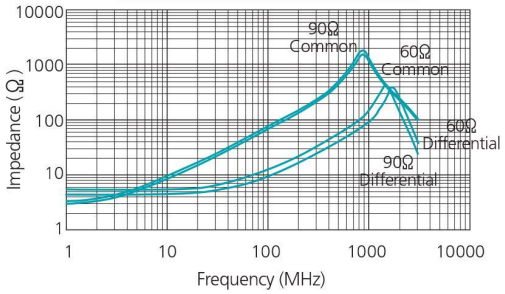
CM/DM Transmission Characteristics(Typ.)



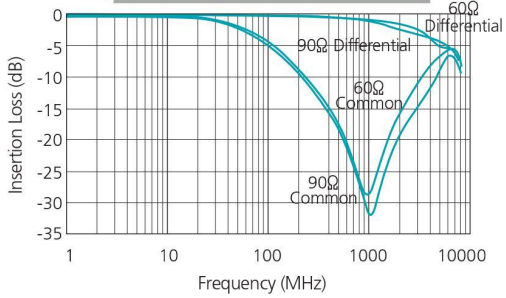
CMFP060503GN Series

Part No.	Common Mode Impedance(Ω) @100MHz	DC Resistance(Ω) [1 line]	Rated Current (mA) Max.	Rated Voltage(V) Max.	Insulation Resistance (MΩ) Min.
CMFP060503GN900MNC	90	3.9 Max.	100	5	10
CMFP060503GN600MNC	60	3.5 Max.	100	5	10

Impedance vs. Frequency Characteristics(Typ.)



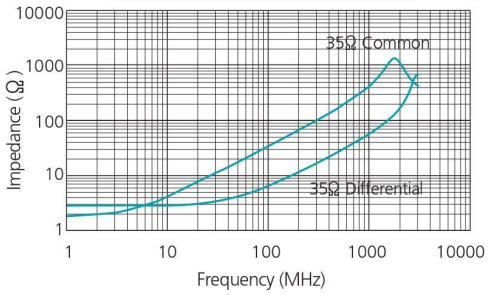
CM/DM Transmission Characteristics(Typ.)



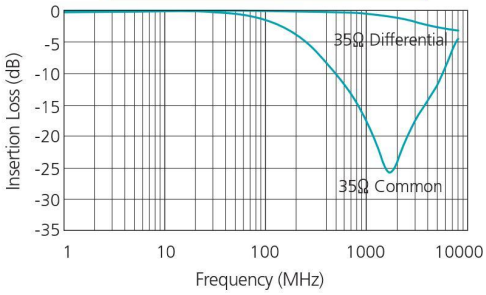
CMFP060503HN Series

Part No.	Common Mode Impedance(Ω) @100MHz	DC Resistance(Ω) [1 line]	Rated Current (mA) Max.	Rated Voltage(V) Max.	Insulation Resistance (MΩ) Min.
CMFP060503HN350NNC	35	2.7 Max.	100	5	10

Impedance vs. Frequency Characteristics(Typ.)

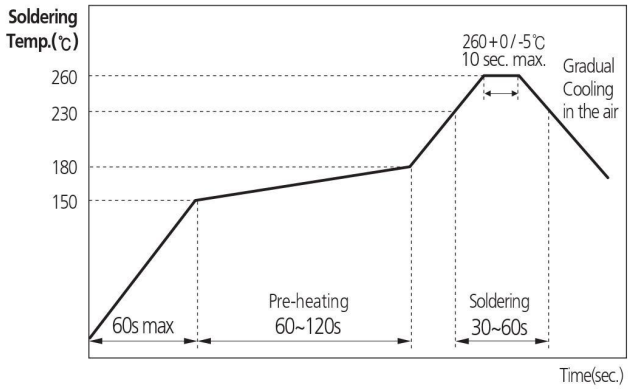


CM/DM Transmission Characteristics(Typ.)



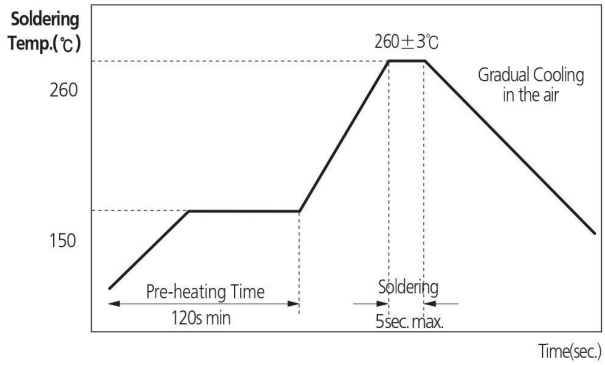
Soldering Condition

▪ REFLOW SOLDERING



SolderingTemp. (℃)	Pre-heating Time (sec)	Soldering Time (sec)
260 + 0/–5℃	60~120	30~60

▪ FLOW SOLDERING



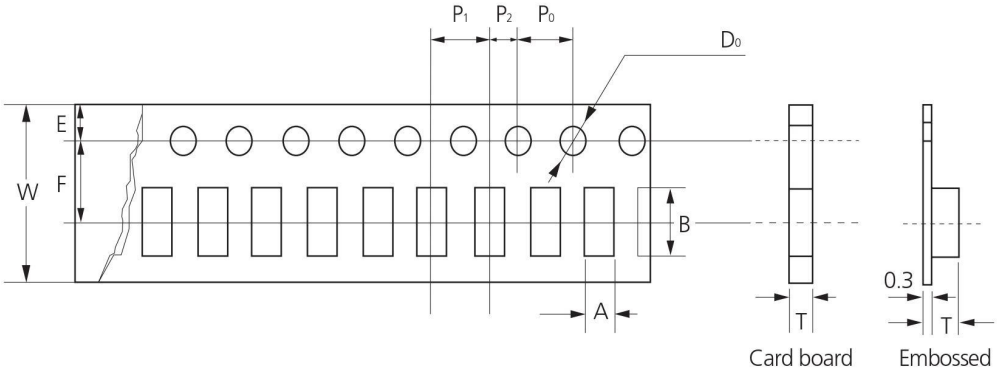
△T(℃)	Soldering Temp. (℃)	Pre-heatingTime(sec)	SolderingTime(sec)
≤150 (1206 and below size)	260± 3	≥120	≤5

▪ SOLDER IRON(Hand Soldering)

Variation of Temp.(℃)	Soldering Temp(℃)	Pre-heating Time(sec.)	Soldering Time(sec.)	Cooling Time(sec.)	Condition of Iron Facilities		
					Wattage	Tip Diameter	Soldering Time
△T≤130	300±10℃ max.	≥ 60 sec.	≤ 4 sec.	-	20W max.	3mm max.	4 sec max.

※Caution - Iron tip should not contact with ceramic body directly

Packaging

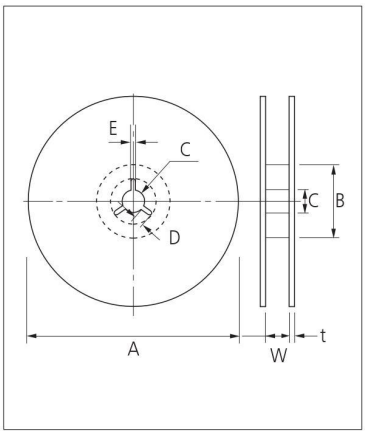


Unit : mm

Type		02	03	05	10		21					22			31			32	41
Tape		Card	Card	Card	Card	Card	Embossed			Card		Embossed			Embossed		Card	Embossed	Embossed
Chip Thickness		0.2	0.3	0.5	0.5	0.8	0.9	1.0	1.25	0.5	0.85	1.0	1.2	0.6	0.8	1.1	0.85	1.3	N:1.6 A:1.2
Chip Cavity	A	0.25 ±0.02	0.40 ±0.06	0.65 ±0.1	1.0 ±0.05	1.0 ±0.2	1.5 ±0.2	1.5 ±0.2	1.5 ±0.2	1.55 ±0.05	1.45 ±0.1	2.29 ±0.1	2.23 ±0.1	1.9 ±0.2	1.9 ±0.2	1.9 ±0.2	2.0 ±0.2	2.9 ±0.2	1.6T:11.9 ±0.2 1.2T:11.7 ±0.2
	B	0.46 ±0.02	0.70 ±0.06	1.15 ±0.1	1.9 ±0.05	1.8 ±0.2	2.3 ±0.2	2.3 ±0.2	2.3 ±0.2	2.3 ±0.55	2.4 ±0.2	2.74 ±0.1	2.73 ±0.10	3.6 ±0.2	3.6 ±0.2	3.6 ±0.2	3.6 ±0.2	3.6 ±0.2	4.9 ±0.2
T max		0.31 ±0.03	0.45	0.8	0.65 ±0.05	1.1	1.1	2.0	2.0	0.6 ±0.05	0.95 ±0.1	1.14 ±0.1	1.6 ±0.1	1.15	1.4	1.4	1.1	1.55	1.6T:1.95 1.2T:1.45
W		8.0 ±0.1	8.0 ±0.2	8.0 ±0.2	0.8 ±0.1	8.0 ±0.2	8.0 ±0.2	8.0 ±0.2	8.0 ±0.2	8.0 ±0.1	8.0 ±0.3	8.0 ±0.2	8.0 ±0.2	8.0 ±0.2	8.0 ±0.2	8.0 ±0.2	8.0 ±0.2	8.0 ±0.2	1.6T:12-0.1+0.3 1.2T:12±0.1
F		3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	3.5 ±0.05	5.5 ±0.05
E		1.75 ±0.05	1.75 ±0.1	1.75 ±0.1	1.75 ±0.05	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1	1.75 ±0.1
P_1		2.0 ±0.05	2.0 ±0.05	2.0 ±0.05	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1
P_2		2.0 ±0.05	2.0 ±0.1	2.0 ±0.1	2.0 ±0.1	2.0 ±0.1	2.0 ±0.05	2.0 ±0.1	2.0 ±0.1	2.0 ±0.05	2.0 ±0.1	2.0 ±0.1	2.0 ±0.1	2.0 ±0.1	2.0 ±0.1	2.0 ±0.05	2.0 ±0.1	2.0 ±0.1	2.0 ±0.05
P_0		4.0 ±0.05	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1	4.0 ±0.1
D_0		Ø1.5 ±0.1	Ø1.5 ±0.1	Ø1.5 ±0.1	Ø1.55 ±0.03	Ø1.5 ±0.1	Ø1.5 ±0.1	Ø1.5 ±0.1	Ø1.5 ±0.1	Ø1.55 ±0.1	Ø1.5 ±0.1	Ø1.55 ±0.1	Ø1.55 ±0.1	Ø1.5 ±0.1	Ø1.5 ±0.1	Ø1.5 ±0.1	Ø1.5 +0.1	Ø1.5 ±0.1	Ø1.5 +0.1
Quantity /Reel (PCS)		20,000	10,000	10,000	4,000	4,000	4,000	3,000	2,000	4,000	4,000	3,000	2,500	4,000	3,000	3,000	4,000	2,500	2,000 /3,000

• **Reel dimensions**

Unit: mm



Symbol	Tape Width	A	B	C	D
7" Reel	8mm	180+0/-3	Ø60+1/-0	Ø13±0.3	4±0.2
	12mm	Ø180+0/-3	Ø60+1/-0	Ø13±0.3	4±0.2
10" Reel	8mm	Ø258+0/-3	Ø80+1/-0	Ø13±0.3	4±0.2
	12mm	Ø258+0/-3	Ø80+1/-0	Ø13±0.3	4±0.2
13" Reel	8mm	Ø330±2.0	Ø80±1.0	Ø13±0.3	4±0.2
	12mm	Ø330±2.0	Ø80±1.0	Ø13±0.3	4±0.2

Symbol	Tape Width	E	W	t
7" Reel	8mm	2.0±0.5	9±0.5	1.2±0.2
	12mm	2.0±0.5	13±0.5	1.2±0.2
10" Reel	8mm	2.0±0.5	9±0.5	1.8±0.2
	12mm	2.0±0.5	13±0.5	1.8±0.2
13" Reel	8mm	2.0±0.5	9±0.5	2.2±0.2
	12mm	2.0±0.5	13±0.5	2.2±0.2

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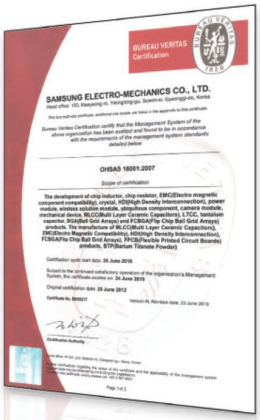
   ② Transportation equipment (vehicles, trains, ships, etc)
   ③ Medical equipment
   ④ Military equipment
   ⑤ Disaster prevention/crime prevention equipment
   ⑥ Any other applications with the same as or similar complexity or reliability to the applications set forth above.

Certifications

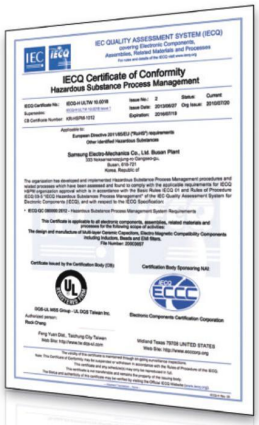
ISO 14001

OHSAS 18001



TS 16949

QC080000



Certification list of Samsung Factory

Certification	Busan (Korea)	Calamba (Philippines)
ISO 14001	20BK00223 - UK	EMS _ 77354
Date Validity	2016-06-25 ~2018-09-14	2015-07-13 ~2018-07-12
OSHAS 18001	BK50217	OHS _ 568723
Date Validity	2016-06-25 ~2019-06-24	2016-10-16 ~2019-10-13
TS16949	TS _ 91430 - 001	TS _ 91430 - 005
Date Validity	2016-07-31 ~2018-09-14	2015-07-20 ~2018-07-19
QC 080000	KR _ HSPM _ 1012	PI _ HSPM _ 1001
Date Validity	2016-07-14 ~2019-07-19	2016-07-11 ~2019-07-04

MEMO

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All information indicated in this catalog is as of August. 2017
* The specifications and designs contained herein may be subject to change without notice.