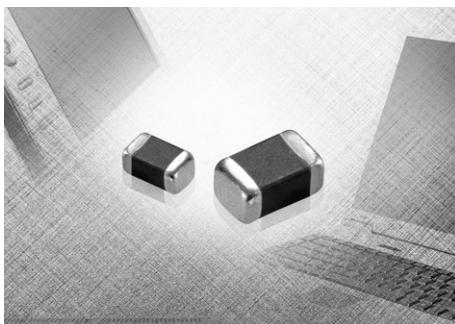


Power Inductor; CIG Series

DC-DC converter Type



General Features

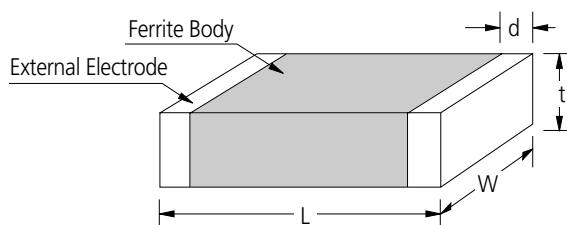
- Low profile (1.0mm max height)
- Magnetically shielded and Low DC resistance
- Lead free termination and internal electrode
- Monolithic structure for high reliability

Application

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

Operating Temp	-40~+125°C (Including self - temperature rise)
Storage Temp	-40~+125°C

Dimensions



SIZE CODE	Dimension (mm)			
	L	W	t	d
CIG10F Series	1.6±0.15	0.8±0.15	0.5 max	0.1~0.5
CIG10W Series	1.6±0.15	0.8±0.15	0.8±0.15	0.1~0.5
CIG21F Series	2.0±0.10	1.25±0.10	0.5 max	0.2~0.7
CIG21W Series	2.0±0.20	1.25±0.20	1.0 max	0.2~0.7
CIG21L Series	2.0±0.10	1.25±0.10	1.0 max	0.2~0.7
CIG21C Series	2.0±0.10	1.25±0.10	1.0 max	0.2~0.7
CIG2MW Series	2.0±0.15	1.6±0.15	1.0 max	0.5±0.2
CIG22L Series	2.5±0.20	2.0±0.20	1.0 max	0.3~0.8
CIG22H Series(MAE)	2.5±0.20	2.0±0.20	1.0 max	0.3~0.8
CIG22H Series(MNE)	2.5±0.20	2.0±0.20	1.2 max	0.3~0.8
CIG22B Series	2.5±0.20	2.0±0.20	1.0 max	0.3~0.8

Part Numbering

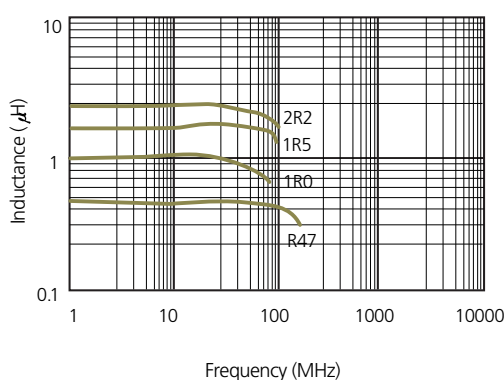
CI **G** **22** **L** **4R7** **M** **N** **E**
 (1) (2) (3) (4) (5) (6) (7) (8)

- (1) Chip inductor
- (2) Power inductor
- (3) Dimensions (10:1608, 21:2012, 2M:2016, 22:2520)
- (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)
- (5) Inductance (R47: 0.47uH, 2R2: 2.2uH, 4R7: 4.7uH)
- (6) Tolerance (M: ±20%)
- (7) Thickness Option (N: Standard, A: Thinner than standard, B: Thicker than standard)
- (8) Package Style (C: Paper tape / 7" reel, E: Embossed tape / 7" reel)

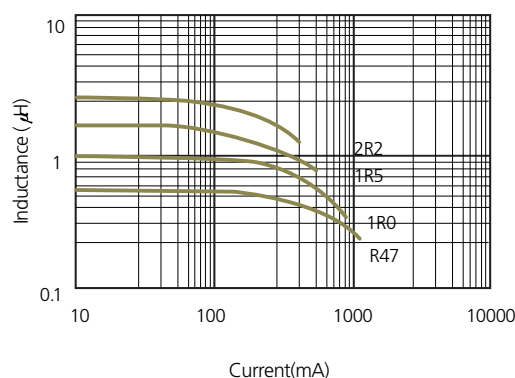
CIG 1608(0603) Type - Low Profile

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current, Idc (A) $\Delta T = 40^\circ\text{C}$
CIG10FR47MNC	0.5max	$0.47 \pm 20\%$	$0.20 \pm 30\%$	0.80
CIG10F1R0MNC	0.5max	$1.0 \pm 20\%$	$0.30 \pm 30\%$	0.70
CIG10F1R5MNC	0.5max	$1.5 \pm 20\%$	$0.35 \pm 30\%$	0.60
CIG10F2R2MNC	0.5max	$2.2 \pm 20\%$	$0.45 \pm 30\%$	0.50

INDUCTANCE



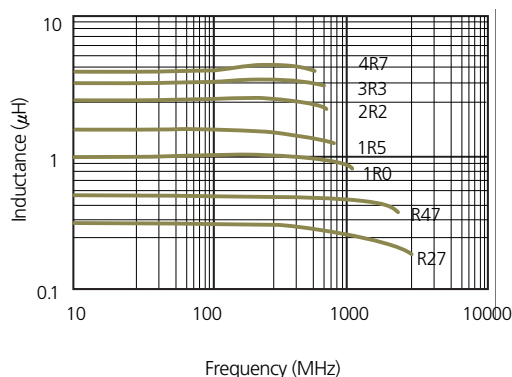
DC BIAS CHARACTERISTIC



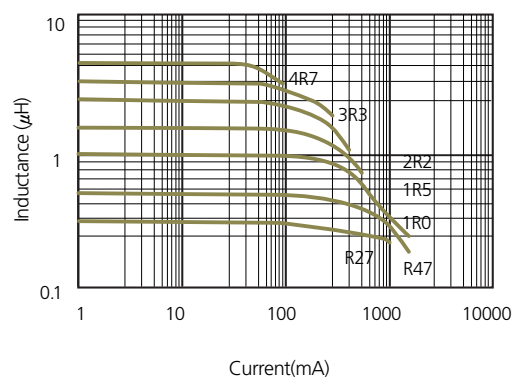
CIG 1608(0603) Type

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current, Idc (A) $\Delta T = 40^\circ\text{C}$
CIG10WR27MNC	0.8 ± 0.15	$0.27 \pm 25\%$	$0.12 \pm 25\%$	1.30
CIG10WR47MNC	0.8 ± 0.15	$0.47 \pm 20\%$	$0.15 \pm 20\%$	1.10
CIG10W1R0MNC	0.8 ± 0.15	$1.0 \pm 20\%$	$0.20 \pm 20\%$	0.95
CIG10W1R5MNC	0.8 ± 0.15	$1.5 \pm 20\%$	$0.25 \pm 20\%$	0.80
CIG10W2R2MNC	0.8 ± 0.15	$2.2 \pm 20\%$	$0.30 \pm 20\%$	0.75
CIG10W3R3MNC	0.8 ± 0.15	$3.3 \pm 20\%$	$0.40 \pm 20\%$	0.70
CIG10W4R7MNC	0.8 ± 0.15	$4.7 \pm 20\%$	$0.50 \pm 20\%$	0.62

INDUCTANCE



DC BIAS CHARACTERISTIC

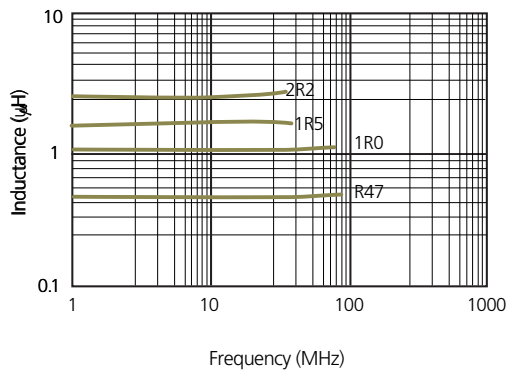


※Test equipment: E4991A + 16092A

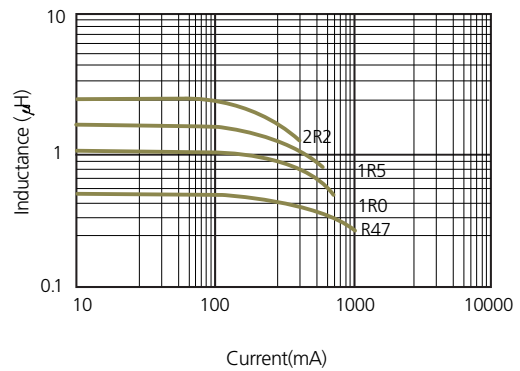
CIG 2012(0805) Type - Low Profile

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}$
CIG21FR47MNC	0.5max	$0.47 \pm 20\%$	$0.12 \pm 25\%$	1.10
CIG21F1R0MNC	0.5max	$1.0 \pm 20\%$	$0.19 \pm 25\%$	0.80
CIG21F1R5MNC	0.5max	$1.5 \pm 20\%$	$0.25 \pm 25\%$	0.70
CIG21F2R2MNC	0.5max	$2.2 \pm 20\%$	$0.34 \pm 25\%$	0.60

INDUCTANCE



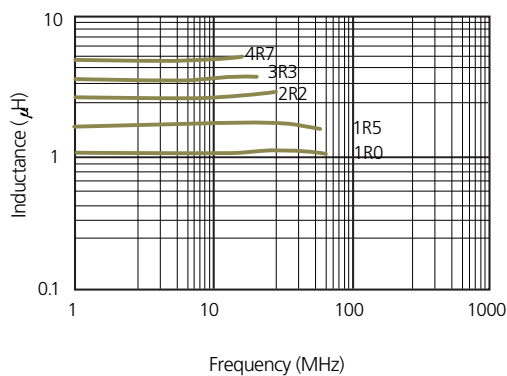
DC BIAS CHARACTERISTIC



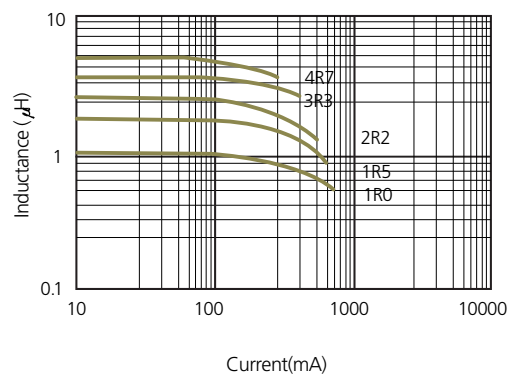
CIG 2012(0805) Type

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}$
CIG21W1R0MNE	1.0max	$1.0 \pm 25\%$	$0.133 \pm 20\%$	1.05
CIG21W1R5MNE	1.0max	$1.5 \pm 25\%$	$0.15 \pm 20\%$	0.96
CIG21W2R2MNE	1.0max	$2.2 \pm 20\%$	$0.20 \pm 20\%$	0.81
CIG21W3R3MNE	1.0max	$3.3 \pm 20\%$	$0.25 \pm 20\%$	0.73
CIG21W4R7MNE	1.0max	$4.7 \pm 20\%$	$0.30 \pm 20\%$	0.65

INDUCTANCE



DC BIAS CHARACTERISTIC

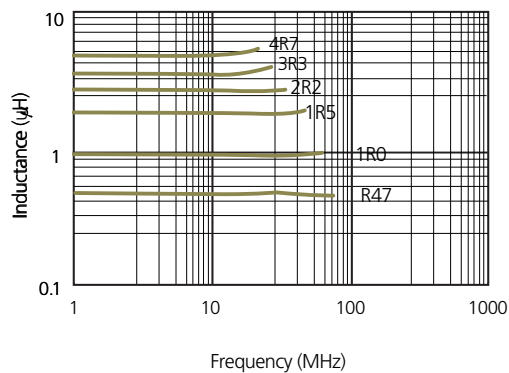


※ Test equipment: E4991A + 16092A

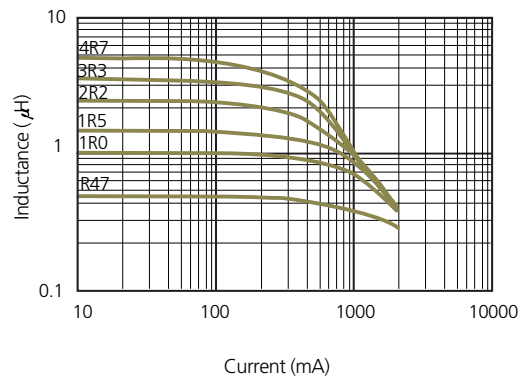
CIG 2012(0805) Type - Low RDC

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}$
CIG21LR47MNE	1.0max	$0.47 \pm 20\%$	$0.08 \pm 20\%$	1.30
CIG21L1R0MNE	1.0max	$1.0 \pm 20\%$	$0.11 \pm 20\%$	1.15
CIG21L1R2MNE	1.0max	$1.2 \pm 20\%$	$0.125 \pm 20\%$	1.10
CIG21L1R5MNE	1.0max	$1.5 \pm 20\%$	$0.14 \pm 20\%$	1.05
CIG21L2R2MNE	1.0max	$2.2 \pm 20\%$	$0.16 \pm 20\%$	0.95
CIG21L3R3MNE	1.0max	$3.3 \pm 20\%$	$0.22 \pm 20\%$	0.80
CIG21L4R7MNE	1.0max	$4.7 \pm 20\%$	$0.26 \pm 20\%$	0.75

INDUCTANCE



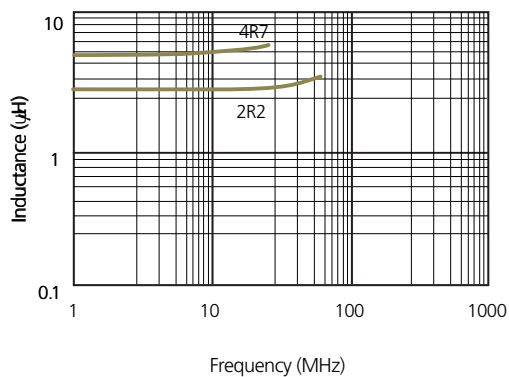
DC BIAS CHARACTERISTIC



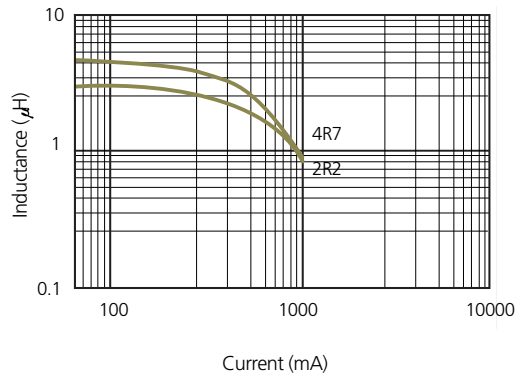
CIG 2012(0805) Type - Choke

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}$
CIG21C2R2MNE	1.0max	$2.2 \pm 20\%$	$0.25 \pm 20\%$	0.80
CIG21C4R7MNE	1.0max	$4.7 \pm 20\%$	$0.433 \pm 20\%$	0.58

INDUCTANCE



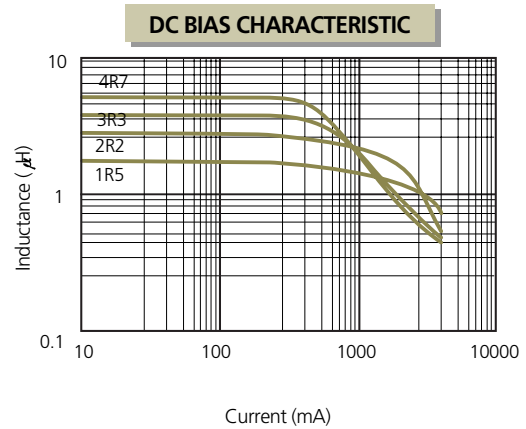
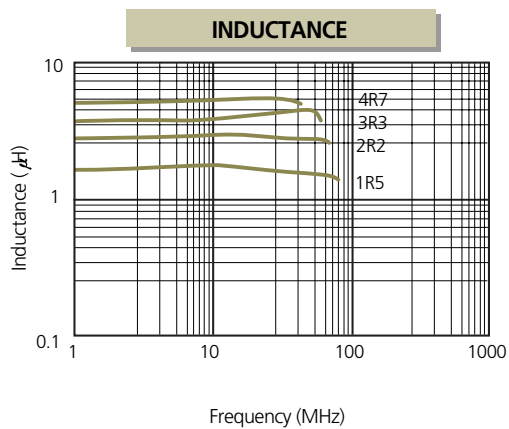
DC BIAS CHARACTERISTIC



※Test equipment: E4991A + 16092A

CIG 2016 Type

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}$
CIG2MW1R5NNE	1.0max	$1.5 \pm 30\%$	$0.11 \pm 25\%$	1.2
CIG2MW2R2NNE	1.0max	$2.2 \pm 30\%$	$0.11 \pm 25\%$	1.2
CIG2MW3R3NNE	1.0max	$3.3 \pm 30\%$	$0.12 \pm 25\%$	1.2
CIG2MW4R7NNE	1.0max	$4.7 \pm 30\%$	$0.14 \pm 25\%$	1.1

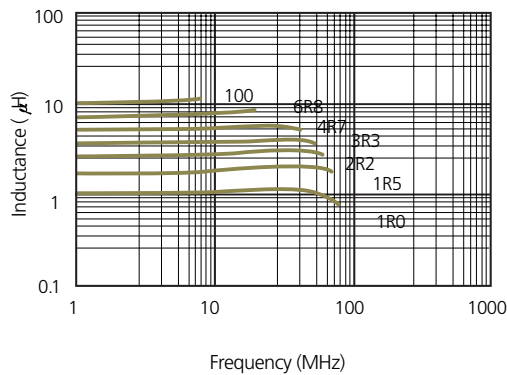


※Test equipment: E4991A + 16092A

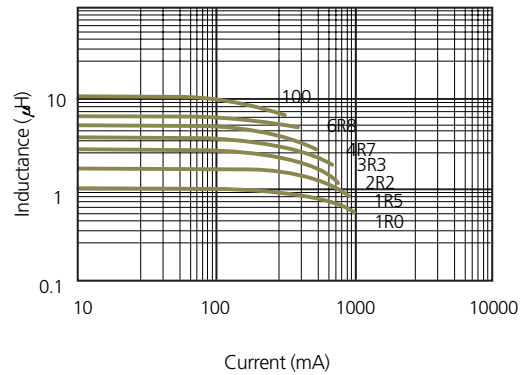
CIG 2520(1008) Type - Low RDC

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}$
CIG22L1R0MNE	1.0max	$1.0 \pm 20\%$	$0.06 \pm 25\%$	1.6
CIG22L1R2MNE	1.0max	$1.2 \pm 20\%$	$0.065 \pm 25\%$	1.5
CIG22L1R5MNE	1.0max	$1.5 \pm 20\%$	$0.07 \pm 25\%$	1.5
CIG22L2R2MNE	1.0max	$2.2 \pm 20\%$	$0.08 \pm 25\%$	1.3
CIG22L3R3MNE	1.0max	$3.3 \pm 20\%$	$0.10 \pm 25\%$	1.2
CIG22L4R7MNE	1.0max	$4.7 \pm 20\%$	$0.11 \pm 25\%$	1.1
CIG22L6R8MNE	1.0max	$6.8 \pm 20\%$	$0.203 \pm 30\%$	0.8
CIG22L100MNE	1.0max	$10.0 \pm 20\%$	$0.323 \pm 30\%$	0.6

INDUCTANCE



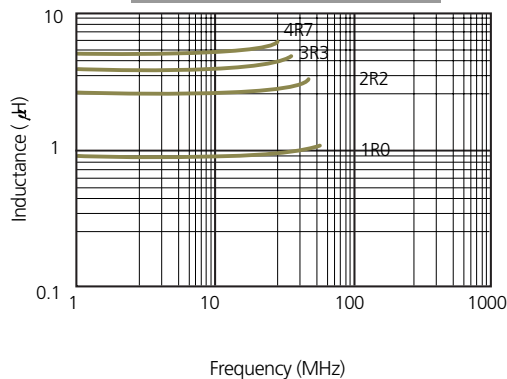
DC BIAS CHARACTERISTIC



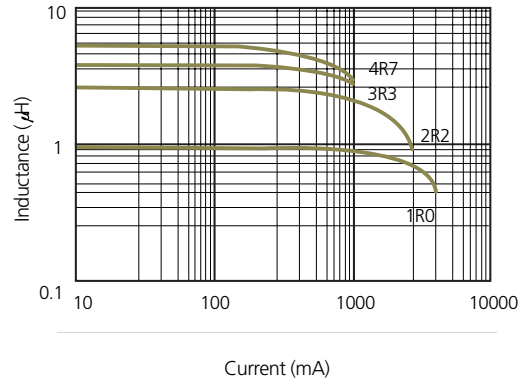
CIG 2520(1008) Type - High Current and Low Profile

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}$
CIG22B1R0MNE	1.0max	$1.0 \pm 20\%$	$0.125 \pm 20\%$	1.2
CIG22B2R2MNE	1.0max	$2.2 \pm 20\%$	$0.183 \pm 20\%$	1.1
CIG22B3R3MNE	1.0max	$3.3 \pm 20\%$	$0.216 \pm 20\%$	1.05
CIG22B4R7MNE	1.0max	$4.7 \pm 20\%$	$0.25 \pm 20\%$	1.0

INDUCTANCE



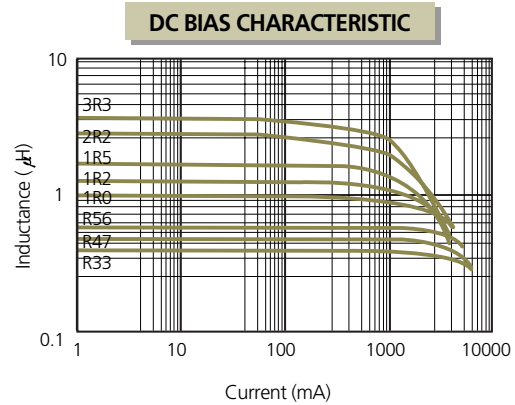
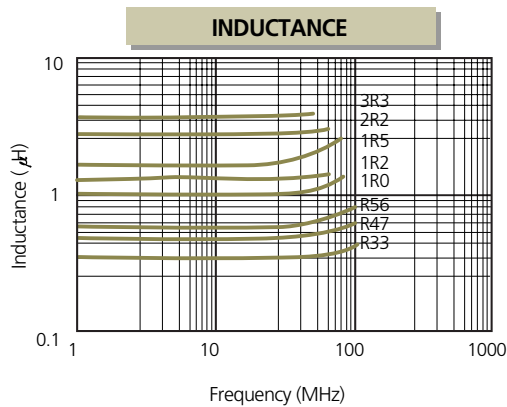
DC BIAS CHARACTERISTIC



※Test equipment: E4991A + 16092A

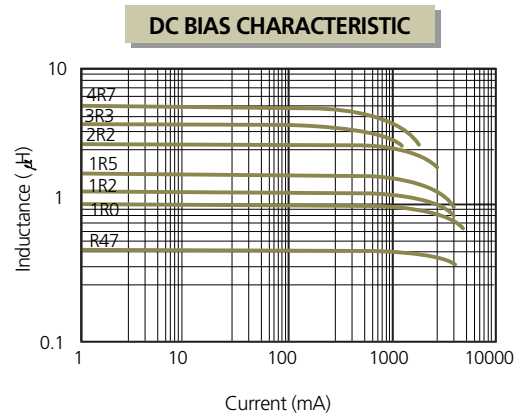
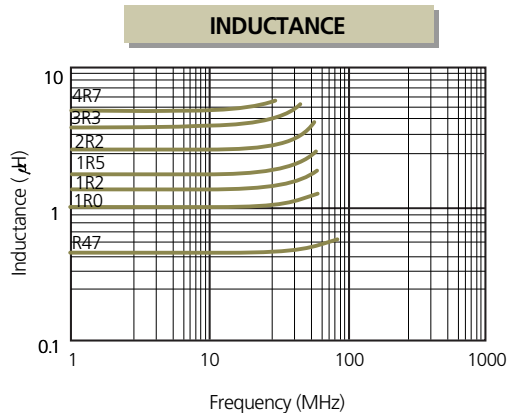
CIG 2520(1008) Type - High Current(1.0t)

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}(\text{typ.})$
CIG22HR33MAE	1.0max	$0.33 \pm 20 \%$	$0.044 \pm 30 \%$	2.95
CIG22HR47MAE	1.0max	$0.47 \pm 20 \%$	$0.044 \pm 30 \%$	2.90
CIG22HR56MAE	1.0max	$0.56 \pm 20 \%$	$0.055 \pm 30 \%$	2.70
CIG22H1R0MAE	1.0max	$1.0 \pm 20 \%$	$0.065 \pm 20 \%$	2.30
CIG22H1R2MAE	1.0max	$1.2 \pm 20 \%$	$0.065 \pm 20 \%$	2.40
CIG22H1R5MAE	1.0max	$1.5 \pm 20 \%$	$0.074 \pm 20 \%$	2.05
CIG22H2R2MAE	1.0max	$2.2 \pm 20 \%$	$0.138 \pm 20 \%$	1.50
CIG22H3R3MAE	1.0max	$3.3 \pm 20 \%$	$0.138 \pm 20 \%$	1.40



CIG 2520(1008) Type - High Current(1.2t)

Part No.	Thickness(mm)	Inductance (μ H) @1MHz	DC Resistance (Ω)	Rated Current. Idc (A) $\Delta T = 40^\circ\text{C}(\text{typ.})$
CIG22H1R0MNE	1.2max	$1.0 \pm 20 \%$	$0.080 \pm 25 \%$	2.0
CIG22H1R2MNE	1.2max	$1.2 \pm 20 \%$	$0.094 \pm 20 \%$	1.9
CIG22H1R5MNE	1.2max	$1.5 \pm 20 \%$	$0.104 \pm 20 \%$	1.6
CIG22H2R2MNE	1.2max	$2.2 \pm 20 \%$	$0.116 \pm 20 \%$	1.6
CIG22H3R3MNE	1.2max	$3.3 \pm 20 \%$	$0.133 \pm 20 \%$	1.5
CIG22H4R7MNE	1.2max	$4.7 \pm 20 \%$	$0.233 \pm 20 \%$	1.0



Chip Inductor; CIH Series

High Frequency Type

CIH
Series



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.

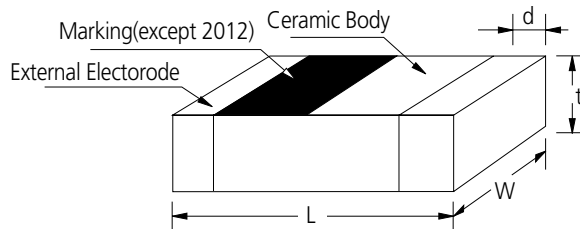
Application

- 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°C
Storage Temp	-10~+40°C

Dimensions



Unit : mm

SIZE CODE	L	W	t	d
03	0.6 ± 0.03	0.3 ± 0.03	0.3 ± 0.03	0.15 ± 0.05
03*	0.6 ± 0.03	0.3 ± 0.03	0.3 ± 0.03	0.10 ± 0.05
05	1.0 ± 0.05	0.5 ± 0.05	0.5 ± 0.05	0.25 ± 0.1
10	1.6 ± 0.15	0.8 ± 0.15	0.8 ± 0.15	0.3 ± 0.2

※ *Mark is "High-Q"

Part Numbering

- | | | | | | | | |
|-----------|----------|-----------|----------|------------|----------|----------|----------|
| CI | H | 03 | T | 12N | J | N | C |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
- (1) Chip Inductor
 (2) H: High frequency type
 (3) Dimension
 (4) Material code(T: Normal, Q: High Q)
 (5) Inductance(4N7: 4.7nH, 10N: 10nH, R10: 100nH)
 (6) Tolerance(C: $\pm 0.2\text{nH}$, S: $\pm 0.3\text{nH}$, J: $\pm 5\%$, K: $\pm 10\%$)
 (7) Thickness option(N: Standard, A: Thinner than standard, B: Thicker than standard)
 (8) Packaging(C: paper tape, E: embossed tape)

CIH 0603(0201) Type - Normal

Part No.	Thickness (mm)	Inductance (nH)	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 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 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 2N2 □	0.3±0.03	2.2±0.2nH, 0.3nH	4	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	14	18	23	24	25	4100	0.48	150
CIH 03T 7N5 □	0.3±0.03	7.5±5%	5	14	18	23	23	25	3700	0.51	1500
CIH 03T 8N2 □	0.3±0.03	8.2±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	17	16	14	9	2100	0.90	100
CIH 03T 22N □	0.3±0.03	22.0±5%	5	13	15	14	11	5	1800	1.2	100
CIH 03T 27N □	0.3±0.03	27.0±5%	4	12	14	10	7	2	1800	1.8	50
CIH 03T 33N □	0.3±0.03	33.0±5%	4	12	14	8	5	1	1700	2.1	50
CIH 03T 39N □	0.3±0.03	39.0±5%	4	12	13	4	1	-	1500	2.4	50
CIH 03T 47N □	0.3±0.03	47.0±5%	4	11	12	2	-	-	1300	2.8	50
CIH 03T 56N □	0.3±0.03	56.0±5%	4	11	11	-	-	-	1100	3.0	50

□ : Tolerance (C : ±0.2nH, S : ±0.3nH, J : ±5%)

※ Test equipment : Agilent E4991A + 16196C

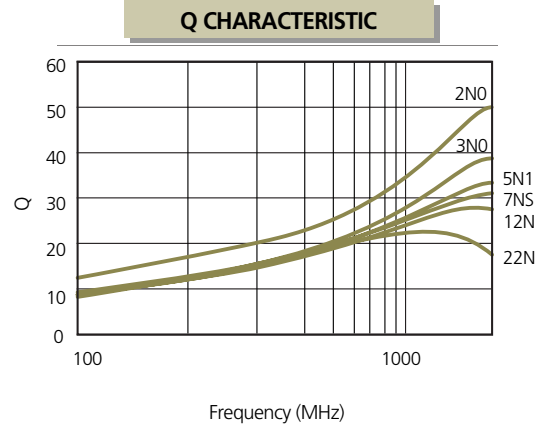
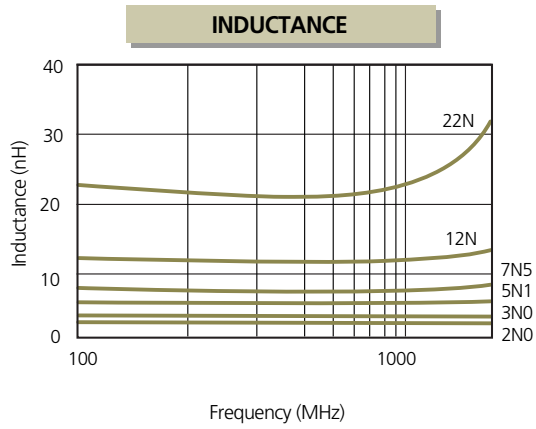
CIH 0603(0201) Type - High Q

CIH
Series

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

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

CIH 0603(0201) Type - High Q



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 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%)

* Test equipment: Agilent E4991A + 16192A

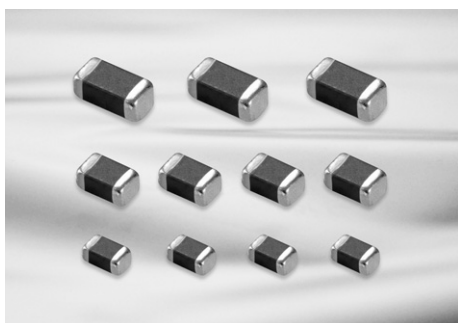
CIH 1608(0603) Type

Part No.	Thickness (mm)	Inductance (nH) @100MHz	Q (typical)		SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
			100MHz	800MHz			
CIH 10T 1N0□	0.8±0.15	1.0±0.3nH	8	20	10000	0.05	800
CIH 10T 1N2□	0.8±0.15	1.2±0.3nH	8	20	10000	0.05	800
CIH 10T 1N5□	0.8±0.15	1.5±0.3nH	8	20	6000	0.10	800
CIH 10T 1N8□	0.8±0.15	1.8±0.3nH	8	20	6000	0.10	800
CIH 10T 2N2□	0.8±0.15	2.2±0.3nH	8	20	6000	0.10	800
CIH 10T 2N7□	0.8±0.15	2.7±0.3nH	10	25	6000	0.10	800
CIH 10T 3N3□	0.8±0.15	3.3±0.3nH, 10%	10	25	6000	0.12	800
CIH 10T 3N9□	0.8±0.15	3.9±0.3nH, 10%	10	27	6000	0.14	800
CIH 10T 4N7□	0.8±0.15	4.7±0.3nH, 10%	10	27	4000	0.16	800
CIH 10T 5N6□	0.8±0.15	5.6±0.3nH, 10%	10	27	4000	0.18	800
CIH 10T 6N8□	0.8±0.15	6.8±10%, 5%	10	27	4000	0.22	700
CIH 10T 8N2□	0.8±0.15	8.2±10%, 5%	10	26	3500	0.24	700
CIH 10T 10N□	0.8±0.15	10.0±10%, 5%	12	26	3400	0.26	600
CIH 10T 12N□	0.8±0.15	12.0±10%, 5%	12	24	2600	0.28	600
CIH 10T 15N□	0.8±0.15	15.0±10%, 5%	12	24	2300	0.32	500
CIH 10T 18N□	0.8±0.15	18.0±10%, 5%	12	24	2000	0.35	500
CIH 10T 22N□	0.8±0.15	22.0±10%, 5%	12	25	1600	0.40	500
CIH 10T 27N□	0.8±0.15	27.0±10%, 5%	12	25	1400	0.45	500
CIH 10T 33N□	0.8±0.15	33.0±10%, 5%	12	24	1200	0.55	500
CIH 10T 39N□	0.8±0.15	39.0±10%, 5%	12	20	1100	0.60	400
CIH 10T 47N□	0.8±0.15	47.0±10%, 5%	12	20	900	0.77	400
CIH 10T 56N□	0.8±0.15	56.0±10%, 5%	12	20	900	0.75	400
CIH 10T 68N□	0.8±0.15	68.0±10%, 5%	12	⁽¹⁾ 20	700	0.85	350
CIH 10T 82N□	0.8±0.15	82.0±10%, 5%	12	⁽¹⁾ 20	600	0.95	350
CIH 10T R10□	0.8±0.15	100.0±10%, 5%	12	⁽¹⁾ 20	600	1.00	350
CIH 10T R12□	0.8±0.15	120.0±10%, 5%	⁽²⁾ 8	-	500	1.20	300
CIH 10T R15□	0.8±0.15	150.0±10%, 5%	⁽²⁾ 8	-	500	1.20	250
CIH 10T R18□	0.8±0.15	180.0±10%, 5%	⁽²⁾ 8	-	400	1.30	250
CIH 10T R22□	0.8±0.15	220.0±10%, 5%	⁽²⁾ 8	-	400	1.50	200
CIH 10T R27□	0.8±0.15	270.0±10%, 5%	⁽²⁾ 8	-	400	1.50	200

□ : Tolerance (S: ±0.3nH, J: ±5%, K: ±10%)

⁽¹⁾ 500MHz, ⁽²⁾ 50MHz,

※ Test equipment : Agilent E4991A + 16092A



Feature

- Magnetic shielding eliminates crosstalk, thus permitting higher mounting density.
- Excellent solderability and high thermal resistance for either flow or reflow soldering.
- Monolithic structure for high reliability.

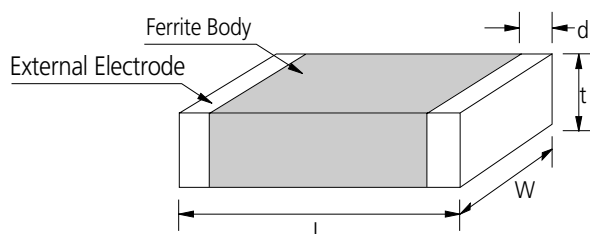
Application

- Resonance circuits, PLL circuits, Noise suppression, etc.

As it has ferrite body and 100 % Ag internal conductor, the CIL series Inductors have excellent Q characteristics and free of cross talk.

Operating Temp	-55~+125°C
Storage Temp	-10~+40°C

Dimensions



Unit : mm

SIZE CODE	L	W	T	d
05	1.0±0.05	0.5±0.05	0.5±0.05	0.25±0.1
10	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
21	2.0±0.2	1.25±0.2	0.85±0.2 1.25±0.2	0.5+0.2,-0.3
31	3.2±0.2	1.6±0.2	0.6±0.2 1.1±0.2	0.5+0.2,-0.3

Part Numbering

- | | | | | | | | |
|-----------|----------|-----------|----------|------------|----------|----------|----------|
| CI | L | 10 | Y | 5R6 | K | N | C |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
- (1) Chip Inductor
 (2) L:General Type
 (3) Dimension
 (4) Material code(N, J, Y, S)
 (5) Inductance(R10:0.1μH, 5R6:5.6μH, 100:10μH)
 (6) Tolerance(K: ±10%, M: ±20%)
 (7) Thickness option(N:Standard, A:Thinner than standard, B:Thicker than standard)
 (8) Packaging(C: paper tape, E:embossed tape)



CIL 1005(0402) Type

Part No.	Thickness (mm)	Inductance (μ H)	Q Min.	L, Q test frequency (MHz)	SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
CIL 05J 2R2 □	0.5 ± 0.05	$2.2 \pm 20\%$, 10%	20	10	40	1.70	10

CIL 1608(0603) Type - Tight Tolerance

Part No.	Thickness (mm)	Inductance (μ H)	Q Min.	L, Q test frequency (MHz)	SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
CIL10NR10 □	0.80 ± 0.15	$0.1 \pm 5\%$	15	25	450	0.35	200
CIL10NR12 □	0.80 ± 0.15	$0.12 \pm 5\%$	15	25	400	0.40	200
CIL10NR15 □	0.80 ± 0.15	$0.15 \pm 5\%$	15	25	350	0.45	200
CIL10NR18 □	0.80 ± 0.15	$0.18 \pm 5\%$	15	25	320	0.50	150
CIL10NR22 □	0.80 ± 0.15	$0.22 \pm 5\%$	15	25	290	0.55	150
CIL10NR27 □	0.80 ± 0.15	$0.27 \pm 5\%$	15	25	260	0.60	150
CIL10NR33 □	0.80 ± 0.15	$0.33 \pm 5\%$	15	25	230	0.75	100
CIL10NR39 □	0.80 ± 0.15	$0.39 \pm 5\%$	15	25	210	0.85	100
CIL10NR47 □	0.80 ± 0.15	$0.47 \pm 5\%$	15	25	190	0.95	100
CIL10NR56 □	0.80 ± 0.15	$0.56 \pm 5\%$	15	25	170	1.05	100
CIL10NR68 □	0.80 ± 0.15	$0.68 \pm 5\%$	15	25	150	1.25	70
CIL10NR82 □	0.80 ± 0.15	$0.82 \pm 5\%$	15	25	130	1.40	70

CIL 1608(0603) Type - Normal

Part No.	Thickness (mm)	Inductance (μ H)	Q Min.	L, Q test frequency (MHz)	SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
CIL 10N 47N □	0.80 $\pm$ 0.15	0.047 $\pm$ 20%, 10%	10	50	260	0.30	50
CIL 10N 56N □	0.80 $\pm$ 0.15	0.056 $\pm$ 20%, 10%	10	50	260	0.30	50
CIL 10N 68N □	0.80 $\pm$ 0.15	0.068 $\pm$ 20%, 10%	10	50	250	0.30	50
CIL 10N 82N □	0.80 $\pm$ 0.15	0.082 $\pm$ 20%, 10%	10	50	245	0.30	50
CIL 10N R10 □	0.80 $\pm$ 0.15	0.10 $\pm$ 20%, 10%	15	25	240	0.50	50
CIL 10N R12 □	0.80 $\pm$ 0.15	0.12 $\pm$ 20%, 10%	15	25	205	0.50	50
CIL 10N R15 □	0.80 $\pm$ 0.15	0.15 $\pm$ 20%, 10%	15	25	180	0.60	50
CIL 10N R18 □	0.80 $\pm$ 0.15	0.18 $\pm$ 20%, 10%	15	25	165	0.60	50
CIL 10N R22 □	0.80 $\pm$ 0.15	0.22 $\pm$ 20%, 10%	15	25	150	0.80	50
CIL 10N R27 □	0.80 $\pm$ 0.15	0.27 $\pm$ 20%, 10%	15	25	136	0.80	50
CIL 10N R33 □	0.80 $\pm$ 0.15	0.33 $\pm$ 20%, 10%	15	25	125	0.85	35
CIL 10N R39 □	0.80 $\pm$ 0.15	0.39 $\pm$ 20%, 10%	15	25	110	1.00	35
CIL 10N R47 □	0.80 $\pm$ 0.15	0.47 $\pm$ 20%, 10%	15	25	105	1.35	35
CIL 10N R56 □	0.80 $\pm$ 0.15	0.56 $\pm$ 20%, 10%	15	25	95	1.55	35
CIL 10N R68 □	0.80 $\pm$ 0.15	0.68 $\pm$ 20%, 10%	15	25	80	1.70	35
CIL 10N R82 □	0.80 $\pm$ 0.15	0.82 $\pm$ 20%, 10%	15	25	75	2.10	35
CIL 10J 1R0 □	0.80 $\pm$ 0.15	1.0 $\pm$ 20%, 10%	35	10	70	0.60	25
CIL 10J 1R2 □	0.80 $\pm$ 0.15	1.2 $\pm$ 20%, 10%	35	10	60	0.80	25
CIL 10J 1R5 □	0.80 $\pm$ 0.15	1.5 $\pm$ 20%, 10%	35	10	55	0.80	25
CIL 10J 1R8 □	0.80 $\pm$ 0.15	1.8 $\pm$ 20%, 10%	35	10	50	0.95	25
CIL 10J 2R2 □	0.80 $\pm$ 0.15	2.2 $\pm$ 20%, 10%	35	10	45	1.15	15
CIL 10J 2R7 □	0.80 $\pm$ 0.15	2.7 $\pm$ 20%, 10%	35	10	40	1.35	15
CIL 10J 3R3 □	0.80 $\pm$ 0.15	3.3 $\pm$ 20%, 10%	35	10	38	1.55	15
CIL 10J 3R9 □	0.80 $\pm$ 0.15	3.9 $\pm$ 20%, 10%	35	10	36	1.70	15
CIL 10J 4R7 □	0.80 $\pm$ 0.15	4.7 $\pm$ 20%, 10%	35	10	33	2.10	15
CIL 10Y 5R6 □	0.80 $\pm$ 0.15	5.6 $\pm$ 20%, 10%	35	4	22	1.55	5
CIL 10Y 6R8 □	0.80 $\pm$ 0.15	6.8 $\pm$ 20%, 10%	35	4	20	1.70	5
CIL 10Y 8R2 □	0.80 $\pm$ 0.15	8.2 $\pm$ 20%, 10%	35	4	18	2.10	5
CIL 10Y 100 □	0.80 $\pm$ 0.15	10.0 $\pm$ 20%, 10%	35	2	17	2.55	5
CIL 10Y 120 □	0.80 $\pm$ 0.15	12.0 $\pm$ 20%, 10%	35	2	15	2.75	5
CIL 10S 150 □	0.80 $\pm$ 0.15	15.0 $\pm$ 20%, 10%	20	1	14	1.70	1
CIL 10S 180 □	0.80 $\pm$ 0.15	18.0 $\pm$ 20%, 10%	20	1	13	1.85	1
CIL 10S 220 □	0.80 $\pm$ 0.15	22.0 $\pm$ 20%, 10%	20	1	11	2.10	1
CIL 10S 270 □	0.80 $\pm$ 0.15	27.0 $\pm$ 20%, 10%	20	1	10	2.75	1
CIL 10S 330 □	0.80 $\pm$ 0.15	33.0 $\pm$ 20%, 10%	20	0.4	9	2.95	1

□: Tolerance (K: $\pm$ 10%, M: $\pm$ 20%)

※ Test equipment: Agilent 4291B+16193A

CIL 2012(0805) Type

Part No.	Thickness (mm)	Inductance (μ H)	Q Min.	L, Q test frequency (MHz)	SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
CIL 21N 47N □	0.85 $\pm$ 0.2	0.047 $\pm$ 20%, 10%	15	50	320	0.20	300
CIL 21N 68N □	0.85 $\pm$ 0.2	0.068 $\pm$ 20%, 10%	15	50	280	0.20	300
CIL 21N 82N □	0.85 $\pm$ 0.2	0.082 $\pm$ 20%, 10%	15	50	255	0.20	300
CIL 21N R10 □	0.85 $\pm$ 0.2	0.10 $\pm$ 20%, 10%	20	25	235	0.20	250
CIL 21N R12 □	0.85 $\pm$ 0.2	0.12 $\pm$ 20%, 10%	20	25	220	0.20	250
CIL 21N R15 □	0.85 $\pm$ 0.2	0.15 $\pm$ 20%, 10%	20	25	200	0.25	250
CIL 21N R18 □	0.85 $\pm$ 0.2	0.18 $\pm$ 20%, 10%	20	25	185	0.25	250
CIL 21N R22 □	0.85 $\pm$ 0.2	0.22 $\pm$ 20%, 10%	20	25	170	0.30	250
CIL 21N R27 □	0.85 $\pm$ 0.2	0.27 $\pm$ 20%, 10%	20	25	150	0.30	250
CIL 21N R33 □	0.85 $\pm$ 0.2	0.33 $\pm$ 20%, 10%	20	25	145	0.30	250
CIL 21N R39 □	0.85 $\pm$ 0.2	0.39 $\pm$ 20%, 10%	25	25	135	0.40	200
CIL 21N R47 □	1.25 $\pm$ 0.2	0.47 $\pm$ 20%, 10%	25	25	125	0.40	200
CIL 21N R56 □	1.25 $\pm$ 0.2	0.56 $\pm$ 20%, 10%	25	25	115	0.50	150
CIL 21N R68 □	1.25 $\pm$ 0.2	0.68 $\pm$ 20%, 10%	25	25	105	0.50	150
CIL 21N R82 □	1.25 $\pm$ 0.2	0.82 $\pm$ 20%, 10%	25	25	100	0.60	150
CIL 21J 1R0 □	0.85 $\pm$ 0.2	1.0 $\pm$ 20%, 10%	45	10	75	0.30	50
CIL 21J 1R2 □	0.85 $\pm$ 0.2	1.2 $\pm$ 20%, 10%	45	10	65	0.40	50
CIL 21J 1R5 □	0.85 $\pm$ 0.2	1.5 $\pm$ 20%, 10%	45	10	60	0.40	50
CIL 21J 1R8 □	0.85 $\pm$ 0.2	1.8 $\pm$ 20%, 10%	45	10	55	0.40	50
CIL 21J 2R2 □	0.85 $\pm$ 0.2	2.2 $\pm$ 20%, 10%	45	10	50	0.50	30
CIL 21J 2R7 □	1.25 $\pm$ 0.2	2.7 $\pm$ 20%, 10%	45	10	45	0.60	30
CIL 21J 3R3 □	1.25 $\pm$ 0.2	3.3 $\pm$ 20%, 10%	45	10	41	0.60	30
CIL 21J 3R9 □	1.25 $\pm$ 0.2	3.9 $\pm$ 20%, 10%	45	10	38	0.80	30
CIL 21J 4R7 □	1.25 $\pm$ 0.2	4.7 $\pm$ 20%, 10%	45	10	35	0.90	30
CIL 21Y 5R6 □	1.25 $\pm$ 0.2	5.6 $\pm$ 20%, 10%	50	4	32	0.50	25
CIL 21Y 6R8 □	1.25 $\pm$ 0.2	6.8 $\pm$ 20%, 10%	50	4	29	0.60	15
CIL 21Y 8R2 □	1.25 $\pm$ 0.2	8.2 $\pm$ 20%, 10%	50	4	26	0.70	15
CIL 21Y 100 □	1.25 $\pm$ 0.2	10.0 $\pm$ 20%, 10%	50	2	24	0.80	15
CIL 21Y 120 □	1.25 $\pm$ 0.2	12.0 $\pm$ 20%, 10%	50	2	22	0.90	15
CIL 21S 150 □	1.25 $\pm$ 0.2	15.0 $\pm$ 20%, 10%	30	1	19	0.80	5
CIL 21S 180 □	1.25 $\pm$ 0.2	18.0 $\pm$ 20%, 10%	30	1	18	0.90	5
CIL 21S 220 □	1.25 $\pm$ 0.2	22.0 $\pm$ 20%, 10%	30	1	16	1.10	5
CIL 21S 270 □	1.25 $\pm$ 0.2	27.0 $\pm$ 20%, 10%	30	1	14	1.15	5
CIL 21S 330 □	1.25 $\pm$ 0.2	33.0 $\pm$ 20%, 10%	30	0.4	13	1.25	5

□: Tolerance (K: $\pm$ 10%, M: $\pm$ 20%)

* Test equipment: Agilent 4291B+16193A

CIL 3216(1206) Type

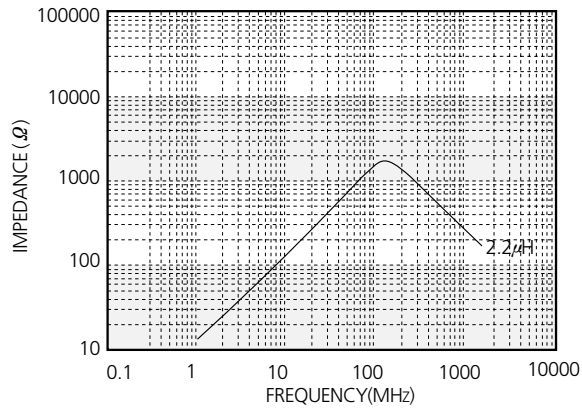
Part No.	Thickness (mm)	Inductance (μ H)	Q Min.	L, Q test frequency (MHz)	SRF (MHz) Min.	DC resistance (Ω) Max.	Rated current (mA) Max.
CIL 31N 47N□	0.6 $\pm$ 0.2	0.047 $\pm$ 20%, 10%	20	50	320	0.15	300
CIL 31N 68N□	0.6 $\pm$ 0.2	0.068 $\pm$ 20%, 10%	20	50	280	0.25	300
CIL 31N R10□	0.6 $\pm$ 0.2	0.10 $\pm$ 20%, 10%	20	25	235	0.25	250
CIL 31N R12□	0.6 $\pm$ 0.2	0.12 $\pm$ 20%, 10%	20	25	220	0.30	250
CIL 31N R15□	0.6 $\pm$ 0.2	0.15 $\pm$ 20%, 10%	20	25	200	0.30	250
CIL 31N R18□	0.6 $\pm$ 0.2	0.18 $\pm$ 20%, 10%	20	25	185	0.40	250
CIL 31N R22□	0.6 $\pm$ 0.2	0.22 $\pm$ 20%, 10%	20	25	170	0.40	250
CIL 31N R27□	0.6 $\pm$ 0.2	0.27 $\pm$ 20%, 10%	20	25	150	0.50	250
CIL 31N R33□	0.6 $\pm$ 0.2	0.33 $\pm$ 20%, 10%	20	25	145	0.60	250
CIL 31N R39□	1.1 $\pm$ 0.2	0.39 $\pm$ 20%, 10%	25	25	135	0.50	200
CIL 31N R47□	1.1 $\pm$ 0.2	0.47 $\pm$ 20%, 10%	25	25	125	0.60	200
CIL 31N R56□	1.1 $\pm$ 0.2	0.56 $\pm$ 20%, 10%	25	25	115	0.70	150
CIL 31N R68□	1.1 $\pm$ 0.2	0.68 $\pm$ 20%, 10%	25	25	105	0.80	150
CIL 31N R82□	1.1 $\pm$ 0.2	0.82 $\pm$ 20%, 10%	25	25	100	0.90	150
CIL 31J 1R0□	0.6 $\pm$ 0.2	1.0 $\pm$ 20%, 10%	45	10	75	0.40	100
CIL 31J 1R2□	0.6 $\pm$ 0.2	1.2 $\pm$ 20%, 10%	45	10	65	0.50	100
CIL 31J 1R5□	1.1 $\pm$ 0.2	1.5 $\pm$ 20%, 10%	45	10	60	0.50	50
CIL 31J 1R8□	1.1 $\pm$ 0.2	1.8 $\pm$ 20%, 10%	45	10	55	0.50	50
CIL 31J 2R2□	1.1 $\pm$ 0.2	2.2 $\pm$ 20%, 10%	45	10	50	0.60	50
CIL 31J 2R7□	1.1 $\pm$ 0.2	2.7 $\pm$ 20%, 10%	45	10	45	0.60	50
CIL 31J 3R3□	1.1 $\pm$ 0.2	3.3 $\pm$ 20%, 10%	45	10	41	0.70	50
CIL 31J 3R9□	1.1 $\pm$ 0.2	3.9 $\pm$ 20%, 10%	45	10	38	0.80	50
CIL 31J 4R7□	1.1 $\pm$ 0.2	4.7 $\pm$ 20%, 10%	45	10	35	0.90	50
CIL 31Y 5R6□	1.1 $\pm$ 0.2	5.6 $\pm$ 20%, 10%	50	4	32	0.70	25
CIL 31Y 6R8□	1.1 $\pm$ 0.2	6.8 $\pm$ 20%, 10%	50	4	29	0.80	25
CIL 31Y 8R2□	1.1 $\pm$ 0.2	8.2 $\pm$ 20%, 10%	50	4	26	0.90	25
CIL 31Y 100□	1.1 $\pm$ 0.2	10.0 $\pm$ 20%, 10%	50	2	24	1.00	25
CIL 31Y 120□	1.1 $\pm$ 0.2	12.0 $\pm$ 20%, 10%	50	2	22	1.05	15
CIL 31S 150□	1.1 $\pm$ 0.2	15.0 $\pm$ 20%, 10%	35	1	19	0.70	5
CIL 31S 180□	1.1 $\pm$ 0.2	18.0 $\pm$ 20%, 10%	35	1	18	0.70	5
CIL 31S 220□	1.1 $\pm$ 0.2	22.0 $\pm$ 20%, 10%	35	1	16	0.90	5
CIL 31S 270□	1.1 $\pm$ 0.2	27.0 $\pm$ 20%, 10%	35	1	14	0.90	5
CIL 31S 330□	1.1 $\pm$ 0.2	33.0 $\pm$ 20%, 10%	35	0.4	13	1.05	5

□: Tolerance (K: $\pm$ 10%, M: $\pm$ 20%)

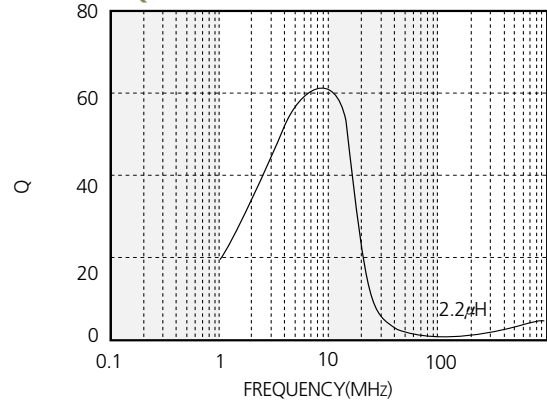
* Test equipment: Agilent 4291B+16193A

CIL 1005(0402) Type

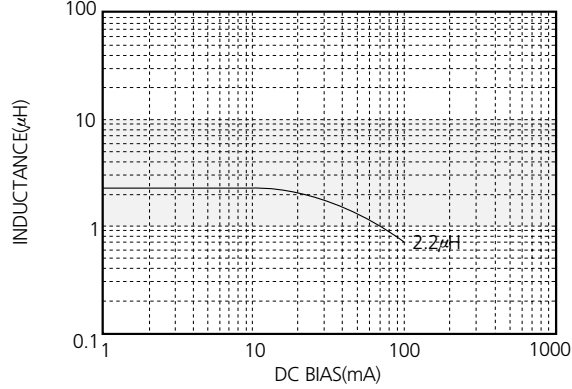
■ IMPEDANCE CHARACTERISTICS



■ Q CHARACTERISTICS

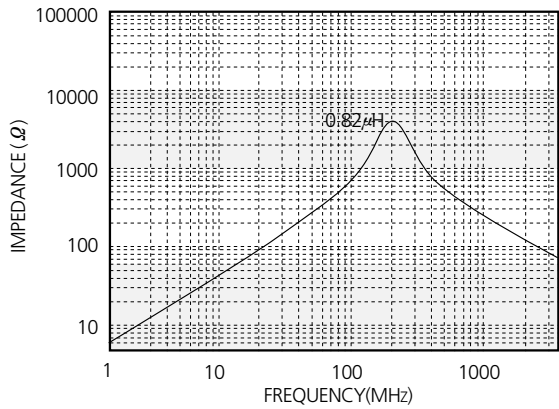


■ DC BIAS CHARACTERISTICS

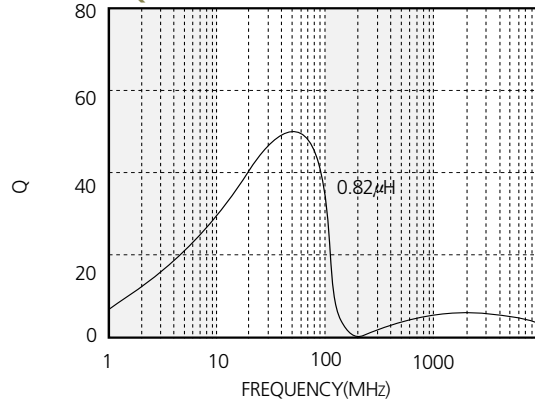


CIL 1608(0603) Type - Tight Tolerance

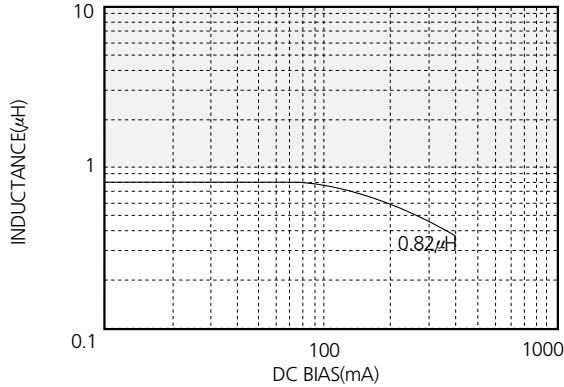
■ IMPEDANCE CHARACTERISTICS



■ Q CHARACTERISTICS

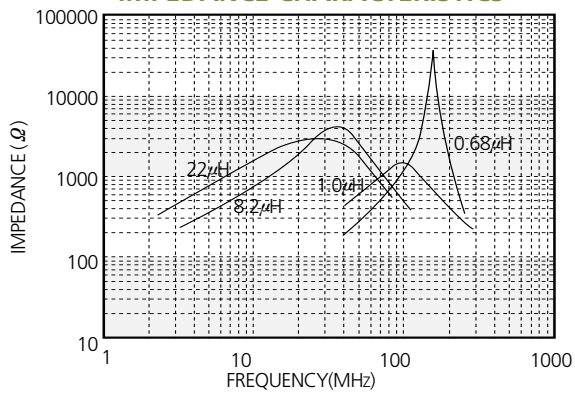


■ DC BIAS CHARACTERISTICS

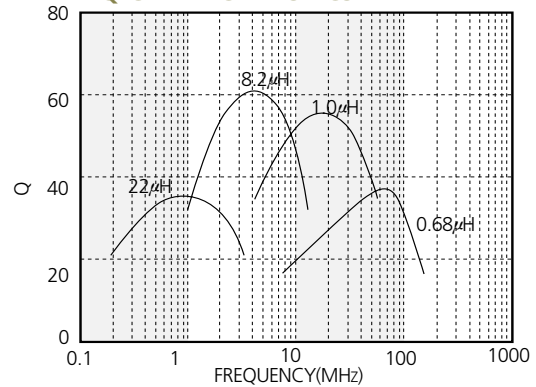


CIL 1608(0603) Type - Normal

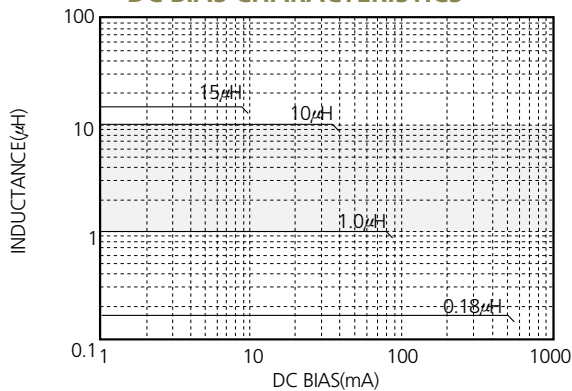
■ IMPEDANCE CHARACTERISTICS



■ Q CHARACTERISTICS

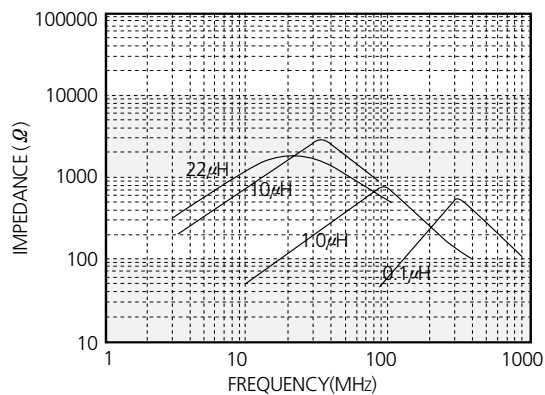


■ DC BIAS CHARACTERISTICS

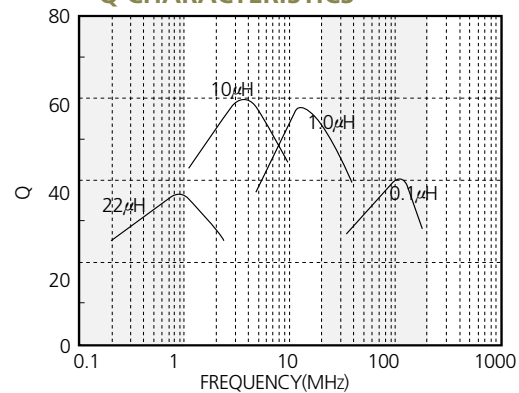


CIL 2012(0805) Type

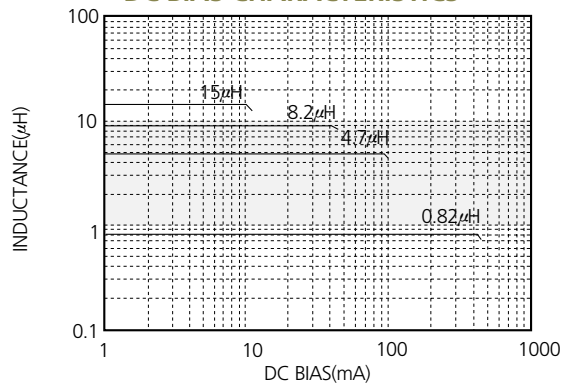
■ IMPEDANCE CHARACTERISTICS



■ Q CHARACTERISTICS

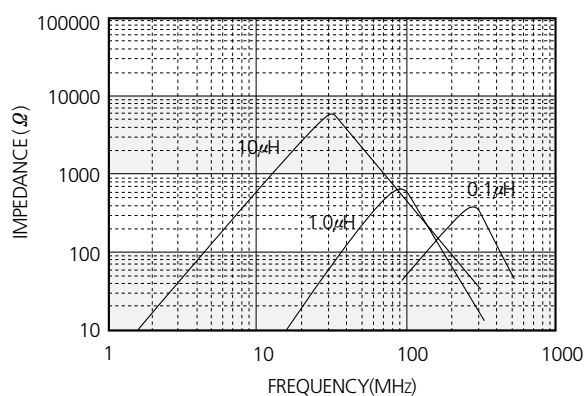


■ DC BIAS CHARACTERISTICS

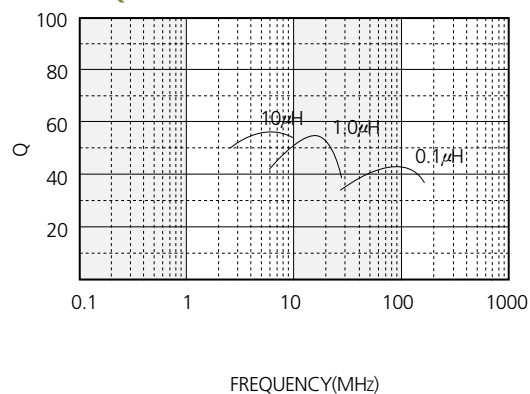


CIL 3216(1206) Type

■ IMPEDANCE CHARACTERISTICS



■ Q CHARACTERISTICS



■ DC BIAS CHARACTERISTICS

