

Multilayer Ferrite Chip Inductors / CMI Series

■ Feature



1. Monolithic structure
2. Closed magnetic circuit
3. S.M.T. type
4. Suitable for flow and reflow soldering
5. Shapes and dimensions follow E.I.A. SPEC
6. Available in various sizes & 6 materials
7. Excellent soldering ability and heat resistance
8. High reliability

■ Application

Noise elimination for four I/O lines of notebook PCs, digital TVs and VTRs, printers, hard disk drives, personal computers and other general consumer and computers products.

Product Identification

CMI 1608 - 1R0 K

1 2 3 4

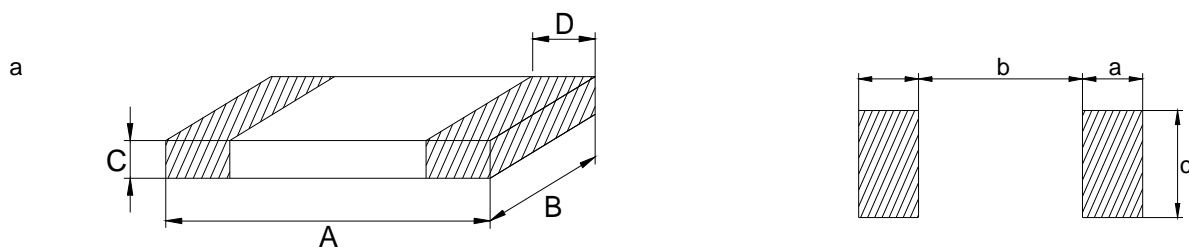
1. Series name.

4. Tolerance.(See Details)

2. Dimension.(See Details)

3. Inductance.(See Details)

Configurations & Dimensions



PCB Pattern

Series Name	A	B	C	D	a	b	c
CMI1608	1.6 ± 0.15	0.8 ± 0.15	0.8 ± 0.15	0.3 ± 0.2	1.0(REF)	0.6(REF)	0.8(REF)
CMI 2012	2.0 ± 0.2	1.25 ± 0.2	0.85 ± 0.2	0.5 ± 0.3	1.0(REF)	1.0(REF)	1.0(REF)
CMI 2012H	2.0 ± 0.2	1.25 ± 0.2	1.25 ± 0.2	0.5 ± 0.3	1.0(REF)	1.0(REF)	1.0(REF)
CMI 2520	2.5 ± 0.2	2.0 ± 0.2	1.6 ± 0.2	0.5 ± 0.3	1.2(REF)	1.5(REF)	1.5(REF)
CMI 3216	3.2 ± 0.2	1.6 ± 0.2	1.1 ± 0.2	0.5 ± 0.3	1.1(REF)	2.2(REF)	1.4(REF)
CMI 3225	3.2 ± 0.2	2.5 ± 0.2	1.3 ± 0.2	0.5 ± 0.3	1.1(REF)	2.2(REF)	3.4(REF)
CMI 4532	4.5 ± 0.2	3.2 ± 0.2	1.5 ± 0.2	0.5 ± 0.3	1.67(REF)	2.57(REF)	4.22(REF)

Unit: mm

Electrical Characteristics / CMI1608

Part Number	Inductance (μ H)	Q Value	Test Frequency (MHz)	SRF (MHz)	DC Resistance (m) Max.	Rated Current (mA) Max.
		Min.		Min.		
CMI1608-47N __	0.047	10	50	260	300	50
CMI 1608-68N __	0.068	10	50	250	300	50
CMI 1608-82N __	0.082	10	50	245	300	50
CMI 1608-R10 __	0.10	15	25	240	500	50
CMI 1608-R12 __	0.12	15	25	205	500	50
CMI 1608-R15 __	0.15	15	25	180	600	50
CMI 1608-R18 __	0.18	15	25	165	600	50
CMI 1608-R22 __	0.22	15	25	150	800	50
CMI 1608-R27 __	0.27	15	25	136	800	50
CMI 1608-R33 __	0.33	15	25	125	850	35
CMI 1608-R39 __	0.39	15	25	110	1,000	35
CMI 1608-R47 __	0.47	15	25	105	1,350	35
CMI 1608-R56 __	0.56	15	25	95	1,550	35
CMI 1608-R68 __	0.68	15	25	80	1,700	35
CMI 1608-R82 __	0.82	15	25	75	2,100	35
CMI 1608-1R0 __	1.0	30	10	70	600	25
CMI 1608-1R2 __	1.2	30	10	60	800	25
CMI 1608-1R5 __	1.5	30	10	55	800	25
CMI 1608-1R8 __	1.8	30	10	50	950	25
CMI 1608-2R2 __	2.2	30	10	45	1,150	15
CMI 1608-2R7 __	2.7	30	10	40	1,350	15
CMI 1608-3R3 __	3.3	30	10	38	1,550	15
CMI 1608-3R9 __	3.9	30	10	36	1,700	15
CMI 1608-4R7 __	4.7	30	10	33	2,100	15
CMI 1608-5R6 __	5.6	30	4	22	1,550	15
CMI 1608-6R8 __	6.8	30	4	20	1,700	15
CMI 1608-8R2 __	8.2	30	4	18	2,100	15
CMI 1608-100 __	10	30	2	17	2,550	15
CMI 1608-120 __	12	30	2	15	2,750	15
CMI 1608-150 __	15	20	1	14	1,700	15
CMI 1608-180 __	18	20	1	13	1,850	15

※ Please specify the inductance tolerance : J,K,L,M (See Details).

※ Rated current that will cause temperature rise approximate 30°C without core loss.

Electrical Characteristics / CMI2012 & CMI2012H

Part Number	Inductance	Q Value	Test Frequency	SRF	DC Resistance	Rated Current
	(μ H)	Min.	(MHz)	(MHz) Min.	(m) Max.	(mA) Max.
CMI2012-47N	0.047	15	50	320	200	300
CMI 2012-68N	0.068	15	50	280	200	300
CMI 2012-82N	0.082	15	50	255	200	300
CMI 2012-R10	0.10	20	25	235	300	250
CMI 2012-R12	0.12	20	25	220	300	250
CMI 2012-R15	0.15	20	25	200	400	250
CMI 2012-R18	0.18	20	25	185	400	250
CMI 2012-R22	0.22	20	25	170	500	250
CMI 2012-R27	0.27	20	25	150	500	250
CMI 2012-R33	0.33	20	25	145	550	250
CMI 2012-R39	0.39	25	25	135	650	200
CMI 2012H-R47	0.47	25	25	125	650	200
CMI 2012H-R56	0.56	25	25	115	750	150
CMI 2012H-R68	0.68	25	25	105	800	150
CMI 2012H-R82	0.82	25	25	100	1,000	150
CMI 2012-1R0	1.0	45	10	75	400	50
CMI 2012-1R2	1.2	45	10	65	500	50
CMI 2012-1R5	1.5	45	10	60	500	50
CMI 2012-1R8	1.8	45	10	55	600	50
CMI 2012-2R2	2.2	45	10	50	650	30
CMI 2012H-2R7	2.7	45	10	45	750	30
CMI 2012H-3R3	3.3	45	10	41	800	30
CMI 2012H-3R9	3.9	45	10	38	900	30
CMI 2012H-4R7	4.7	45	10	35	1,000	30
CMI 2012H-5R6	5.6	45	4	32	900	15
CMI 2012H-6R8	6.8	45	4	29	1,000	15
CMI 2012H-8R2	8.2	45	4	26	1,100	15
CMI 2012H-100	10	45	2	24	1,150	15
CMI 2012H-120	12	45	2	22	1,250	15
CMI 2012H-150	15	30	1	19	800	5
CMI 2012H-180	18	30	1	18	900	5
CMI 2012H-220	22	30	1	16	1,100	5
CMI 2012H-270	27	30	1	14	1,150	5

※ Please specify the inductance tolerance : J,K,L,M (See Details).

※ Rated current that will cause temperature rise approximate 30°C without core loss.

Electrical Characteristics / CMI2520

Part Number	Inductance (uH)	Q Value	Test Frequency (MHz)	SRF (MHz)	DC Resistance (m)	Rated Current (mA)
		Min.		Min.	Max.	Max.
CMI 2520-R10	0.10	30	25.2	680	210	450
CMI 2520-R12	0.12	30	25.2	650	220	400
CMI 2520-R15	0.15	30	25.2	530	250	400
CMI 2520-R18	0.18	30	25.2	520	290	370
CMI 2520-R22	0.22	30	25.2	390	300	370
CMI 2520-R27	0.27	30	25.2	330	330	350
CMI 2520-R33	0.33	30	25.2	310	390	350
CMI 2520-R39	0.39	30	25.2	290	400	320
CMI 2520-R47	0.47	30	25.2	240	440	300
CMI 2520-R56	0.56	30	25.2	210	490	250
CMI 2520-R68	0.68	30	25.2	180	520	250
CMI 2520-R82	0.82	30	25.2	155	610	200
CMI 2520-1R0	1.0	30	7.96	140	750	150
CMI 2520-1R2	1.2	30	7.96	135	870	120
CMI 2520-1R5	1.5	30	7.96	130	1,000	110
CMI 2520-1R8	1.8	30	7.96	120	1,100	100
CMI 2520-2R2	2.2	30	7.96	105	1,300	100
CMI 2520-2R7	2.7	30	7.96	90	1,400	100
CMI 2520-3R3	3.3	30	7.96	80	1,600	80
CMI 2520-3R9	3.9	30	7.96	75	1,700	80
CMI 2520-4R7	4.7	30	7.96	65	1,900	80
CMI 2520-5R6	5.6	30	7.96	60	2,200	80
CMI 2520-6R8	6.8	30	7.96	55	2,400	70
CMI 2520-8R2	8.2	30	7.96	50	2,600	50
CMI 2520-100	10	25	2.52	30	2,200	30
CMI 2520-120	12	25	2.52	27	2,500	20
CMI 2520-150	15	25	2.52	23	2,800	20
CMI 2520-180	18	25	2.52	22	3,200	20
CMI 2520-220	22	25	2.52	21	3,600	20
CMI 2520-270	27	25	2.52	19	4,300	15
CMI 2520-330	33	25	2.52	17	4,700	15

※ Please specify the inductance tolerance : J,K,L,M (See Details).

※ Rated current that will cause temperature rise approximate 30°C without core loss.

Multilayer Ferrite Chip Inductors / CMI Series

Electrical Characteristics / CMI3216

Part Number	Inductance (μH)	Q Value	Test Frequency (MHz)	SRF (MHz)	DC Resistance ($\text{m}\Omega$)	Rated Current (mA)
		Min.		Min.	Max.	Max.
CMI3216-47N __	0.047	20	50	320	150	300
CMI 3216-68N __	0.068	20	50	280	250	300
CMI 3216-R10 __	0.10	20	25	235	250	250
CMI 3216-R12 __	0.12	20	25	220	300	250
CMI 3216-R15 __	0.15	20	25	200	300	250
CMI 3216-R18 __	0.18	20	25	185	400	250
CMI 3216-R22 __	0.22	20	25	170	400	250
CMI 3216-R27 __	0.27	20	25	150	500	250
CMI 3216-R33 __	0.33	20	25	145	500	250
CMI 3216-R39 __	0.39	25	25	135	600	250
CMI 3216-R47 __	0.47	25	25	125	600	200
CMI 3216-R56 __	0.56	25	25	115	700	200
CMI 3216-R68 __	0.68	25	25	105	800	150
CMI 3216-R82 __	0.82	25	25	100	900	150
CMI 3216-1R0 __	1.0	45	10	75	400	100
CMI 3216-1R2 __	1.2	45	10	65	500	100
CMI 3216-1R5 __	1.5	45	10	60	500	50
CMI 3216-1R8 __	1.8	45	10	55	500	50
CMI 3216-2R2 __	2.2	45	10	50	600	50
CMI 3216-2R7 __	2.7	45	10	45	600	50
CMI 3216-3R3 __	3.3	45	10	41	700	50
CMI 3216-3R9 __	3.9	45	10	38	800	50
CMI 3216-4R7 __	4.7	45	10	35	900	50
CMI 3216-5R6 __	5.6	50	4	32	700	25
CMI 3216-6R8 __	6.8	50	4	29	800	25
CMI 3216-8R2 __	8.2	50	4	26	900	25
CMI 3216-100 __	10	50	2	24	1,000	25
CMI 3216-120 __	12	50	2	22	1,050	15
CMI 3216-150 __	15	35	1	19	700	5
CMI 3216-180 __	18	35	1	18	700	5
CMI 3216-220 __	22	35	1	16	900	5
CMI 3216-270 __	27	35	1	14	900	5
CMI 3216-330 __	33	35	0.4	13	1,050	5

※ Please specify the inductance tolerance : J,K,L,M (See Details).

※ Rated current that will cause temperature rise approximate 30°C without core loss.

Electrical Characteristics / CMI3225

Part Number	Inductance (μ H)	Q Value	Test Frequency (MHz)	SRF (MHz)	DC Resistance (m)	Rated Current (mA)
		Min.		Min.	Max.	Max.
CMI 3225-R12 __	0.12	30	25.2	500	220	450
CMI 3225-R15 __	0.15	30	25.2	450	250	450
CMI 3225-R18 __	0.18	30	25.2	380	280	420
CMI 3225-R22 __	0.22	30	25.2	350	320	420
CMI 3225-R27 __	0.27	30	25.2	260	360	420
CMI 3225-R33 __	0.33	30	25.2	220	400	400
CMI 3225-R39 __	0.39	30	25.2	200	450	400
CMI 3225-R47 __	0.47	30	25.2	180	500	370
CMI 3225-R56 __	0.56	30	25.2	150	550	320
CMI 3225-R68 __	0.68	30	25.2	140	600	300
CMI 3225-R82 __	0.82	30	25.2	130	650	280
CMI 3225-1R0 __	1.0	30	7.96	120	700	200
CMI 3225-1R2 __	1.2	30	7.96	100	750	150
CMI 3225-1R5 __	1.5	30	7.96	85	850	150
CMI 3225-1R8 __	1.8	30	7.96	80	900	150
CMI 3225-2R2 __	2.2	30	7.96	75	1,000	150
CMI 3225-2R7 __	2.7	30	7.96	70	1,100	120
CMI 3225-3R3 __	3.3	30	7.96	60	1,200	120
CMI 3225-3R9 __	3.9	30	7.96	55	1,300	120
CMI 3225-4R7 __	4.7	30	7.96	50	1,500	120
CMI 3225-5R6 __	5.6	30	7.96	47	1,600	120
CMI 3225-6R8 __	6.8	30	7.96	43	1,800	100
CMI 3225-8R2 __	8.2	30	7.96	40	2,000	90
CMI 3225-100 __	10	30	2.52	36	2,100	45
CMI 3225-120 __	12	30	2.52	33	2,500	45
CMI 3225-150 __	15	30	2.52	30	2,800	35
CMI 3225-180 __	18	30	2.52	27	3,300	35
CMI 3225-220 __	22	30	2.52	25	3,700	35
CMI 3225-270 __	27	30	2.52	20	5,000	15
CMI 3225-330 __	33	30	2.52	17	5,600	15

※ Please specify the inductance tolerance : J,K,L,M (See Details).

※ Rated current that will cause temperature rise approximate 30°C without core loss.

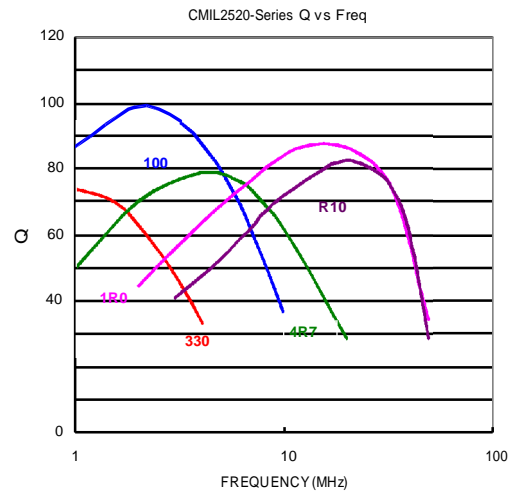
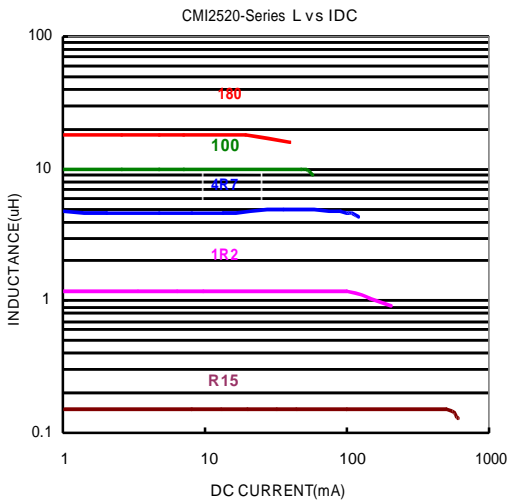
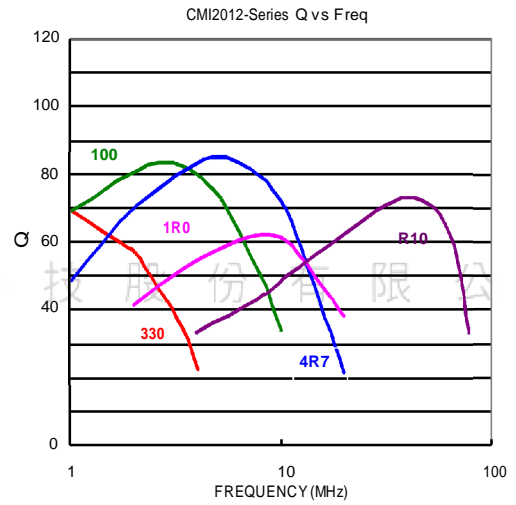
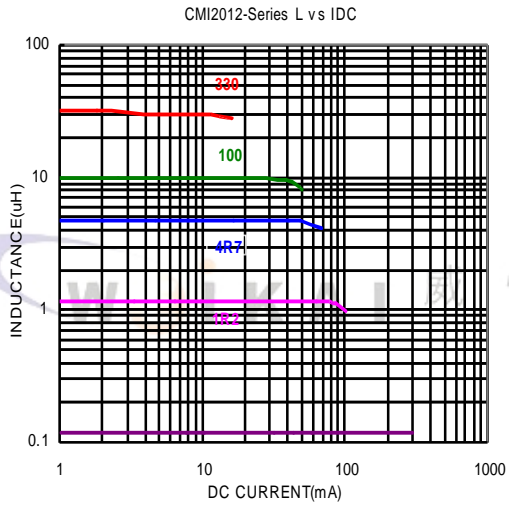
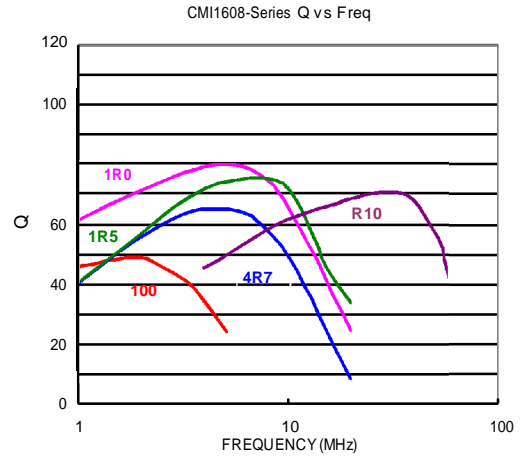
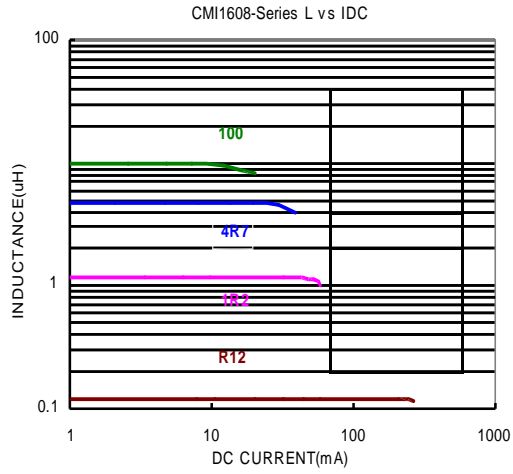
Electrical Characteristics / CMI4532

Part Number	Inductance (uH)	Q Value	Test Frequency (MHz)	SRF (MHz)	DC Resistance (m)	Rated Current (mA)
		Min.		Min.	Max.	Max.
CMI4532-R10 __	0.10	35	25.2	300	180	700
CMI 4532-R12 __	0.12	35	25.2	250	200	670
CMI 4532-R15 __	0.15	35	25.2	180	220	670
CMI 4532-R18 __	0.18	35	25.2	140	240	670
CMI 4532-R22 __	0.22	40	25.2	120	250	640
CMI 4532-R27 __	0.27	40	25.2	105	260	605
CMI 4532-R33 __	0.33	40	25.2	100	280	575
CMI 4532-R39 __	0.39	40	25.2	95	300	545
CMI 4532-R47 __	0.47	40	25.2	90	320	510
CMI 4532-R56 __	0.56	40	25.2	85	360	480
CMI 4532-R68 __	0.68	40	25.2	80	400	445
CMI 4532-R82 __	0.82	40	25.2	75	450	415
CMI 4532-1R0 __	1.0	50	7.96	70	500	370
CMI 4532-1R2 __	1.2	50	7.96	60	550	300
CMI 4532-1R5 __	1.5	50	7.96	54	600	300
CMI 4532-1R8 __	1.8	50	7.96	50	650	300
CMI 4532-2R2 __	2.2	50	7.96	46	700	250
CMI 4532-2R7 __	2.7	50	7.96	43	750	170
CMI 4532-3R3 __	3.3	50	7.96	40	800	160
CMI 4532-3R9 __	3.9	50	7.96	35	900	160
CMI 4532-4R7 __	4.7	50	7.96	32	1,000	160
CMI 4532-5R6 __	5.6	50	7.96	30	1,100	150
CMI 4532-6R8 __	6.8	50	7.96	27	1,200	150
CMI 4532-8R2 __	8.2	50	7.96	25	1,400	120
CMI 4532-100 __	10	50	2.52	20	1,600	100
CMI 4532-120 __	12	50	2.52	18	2,000	65
CMI 4532-150 __	15	50	2.52	17	2,500	60
CMI 4532-180 __	18	50	2.52	15	2,800	55
CMI 4532-220 __	22	50	2.52	13	3,200	45
CMI 4532-270 __	27	50	2.52	12	3,600	40
CMI 4532-330 __	33	50	2.52	11	4,000	40

※ Please specify the inductance tolerance : J,K,L,M (See Details).

※ Rated current that will cause temperature rise approximate 30°C without core loss.

Electrical Curve / CMI1608&CMI2012&CMI2520



Electrical Curve/ CMI3216 & CMI3225&CMI45

