Multilayer Chip Ceramic Inductor – AMCI-C Series

Operating Temp. : AMCI1005C series: -55℃~+125℃
AMCI1608C series: -40℃~+85℃

FEATURES

- Monolithic structure for high reliability
- High self-resonant frequency
- Excellent solderability and high heat resistance

APPLICATIONS

- RF circuit in telecommunication and other equipments

PRODUCT IDENTIFICATION

AMCI	1608	C	10N	F	T
①	②	③	④	⑤	⑥

①

Type	
AMCI	Chip Ceramic Inductor

②

External Dimensions (L×W) (mm)	
1005 [0402]	1.0×0.5
1608 [0603]	1.6×0.8

③

Material Code
C

④

Nominal Inductance	
Example	Nominal Value
3N9	3.9nH
10N	10nH
R10	100nH

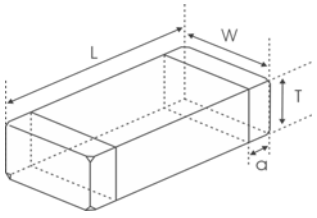
⑤

Inductance Tolerance	
A	±0.1nH
B	±0.2nH
C	±0.3nH
E	±3%
F	±5%
G	±10%

⑥

Packing	
T	Tape & Reel
1005	10,000 pcs
1608	4,000 pcs

SHAPE AND DIMENSIONS



Unit: mm [inch]

Type	L	W	T	a
AMCI1005 [0402]	1.0±0.15 [.039±.006]	0.5±0.15 [.020±.006]	0.5±0.15 [.020±.006]	0.25±0.1 [.010±.004]
AMCI1608 [0603]	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.3±0.2 [.012±.008]
	1.65±0.15 [.065±.006]			

SPECIFICATIONS

AMCI1005C Series

Part Number	Inductance	Min. Quality Factor	L,Q Test Freq. L/Q	Typical Q @ Freq. (MHz)			Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
				100	800	1000			
Units	nH	-	MHz	-			MHz	Ω	mA
Symbol	L	Q	Freq	Q			S.R.F	DCR	Ir
AMCI1005C0N6□T	0.6	4	100	6	35	41	10000	0.10	800
AMCI1005C1N0□T	1.0	8	100	11	34	36	10000	0.10	400
AMCI1005C1N1□T	1.1	8	100	11	34	36	10000	0.10	400
AMCI1005C1N2□T	1.2	8	100	11	34	36	10000	0.10	400
AMCI1005C1N3□T	1.3	8	100	11	34	36	10000	0.10	400
AMCI1005C1N5□T	1.5	8	100	11	34	36	6000	0.10	300
AMCI1005C1N6□T	1.6	8	100	11	32	35	6000	0.10	300
AMCI1005C1N8□T	1.8	8	100	11	30	34	6000	0.10	300
AMCI1005C2N0□T	2.0	8	100	10	29	33	6000	0.20	300
AMCI1005C2N2□T	2.2	8	100	10	29	33	6000	0.20	300
AMCI1005C2N4□T	2.4	8	100	10	29	32	6000	0.20	300
AMCI1005C2N7□T	2.7	8	100	10	29	32	6000	0.20	300
AMCI1005C3N0□T	3.0	8	100	10	29	32	6000	0.20	300
AMCI1005C3N3□T	3.3	8	100	10	29	32	6000	0.20	300
AMCI1005C3N6□T	3.6	8	100	10	28	31	4000	0.20	300
AMCI1005C3N9□T	3.9	8	100	10	28	31	4000	0.20	300
AMCI1005C4N3□T	4.3	8	100	10	28	31	4000	0.20	300
AMCI1005C4N7□T	4.7	8	100	10	28	31	4000	0.20	300
AMCI1005C5N1□T	5.1	8	100	10	28	30	4000	0.30	300
AMCI1005C5N6□T	5.6	8	100	10	28	30	4000	0.30	300
AMCI1005C6N2□T	6.2	8	100	10	27	30	3900	0.30	300
AMCI1005C6N8□T	6.8	8	100	10	27	30	3900	0.30	300
AMCI1005C7N5□T	7.5	8	100	10	27	30	3700	0.40	300
AMCI1005C8N2□T	8.2	8	100	10	27	30	3600	0.40	300
AMCI1005C9N1□T	9.1	8	100	10	27	30	3400	0.40	300
AMCI1005C10N□T	10	8	100	10	27	30	3200	0.40	300
AMCI1005C12N□T	12	8	100	10	26	29	2700	0.50	300
AMCI1005C15N□T	15	8	100	10	26	28	2300	0.50	300
AMCI1005C18N□T	18	8	100	10	25	27	2100	0.60	300
AMCI1005C20N□T	20	8	100	10	25	26	2000	0.60	300
AMCI1005C22N□T	22	8	100	10	25	25	1900	0.60	300
AMCI1005C27N□T	27	8	100	10	25	23	1600	0.70	300
AMCI1005C33N□T	33	8	100	10	22	22	1300	0.80	200
AMCI1005C39N□T	39	8	100	10	22	19	1200	1.00	200
AMCI1005C43N□T	43	8	100	10	21	16	1100	1.10	200
AMCI1005C47N□T	47	8	100	10	21	16	1000	1.10	200
AMCI1005C56N□T	56	8	100	10	18	13	750	1.20	200
AMCI1005C68N□T	68	8	100	10	18	9	750	1.40	180
AMCI1005C82N□T	82	8	100	10	13	-	750	2.40	150
AMCI1005CR10□T	100	8	100	10	12	-	700	2.60	150
AMCI1005CR12□T	120	8	100	10	-	-	600	2.80	150
AMCI1005CR15□T	150	8	100	10	-	-	550	3.20	100
AMCI1005CR18□T	180	8	100	10	-	-	500	3.70	100
AMCI1005CR22□T	220	8	100	12	-	-	450	4.00	100
AMCI1005CR27□T	270	8	100	12	-	-	400	4.50	100
AMCI1005CR30□T	300	8	100	12	-	-	400	4.50	100
AMCI1005CR33□T	330	6	50	8	-	-	350	7.00	50
AMCI1005CR36□T	360	6	50	8	-	-	300	7.50	50

※□: Please specify the inductance tolerance. For L≤6.2nH, choose A=±0.1nH, B=±0.2nH or C=±0.3nH; For L>6.2nH, choose E=±3%, F=±5% or G=±10%.

SPECIFICATIONS

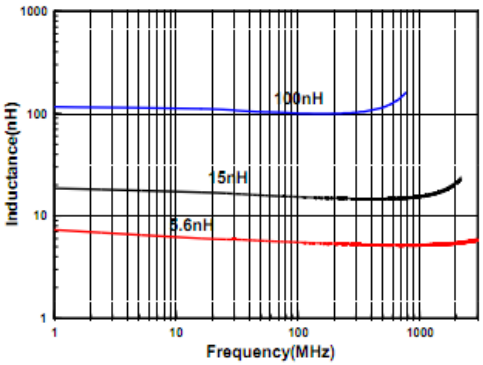
AMCI1608C Series

Part Number	Inductance	Min. Quality Factor	L,Q Test Freq. L/Q	Typical Q @ Freq. (MHz)			Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
				100	800	1000			
Units	nH	-	MHz	-			MHz	Ω	mA
Symbol	L	Q	Freq	Q			S.R.F	DCR	Ir
AMCI1608C1N0CT	1.0±0.3	8	100	13	70	80	10000	0.05	500
AMCI1608C1N2CT	1.2±0.3	8	100	13	60	70	10000	0.05	500
AMCI1608C1N5CT	1.5±0.3	8	100	13	47	68	6000	0.10	500
AMCI1608C1N8CT	1.8±0.3	8	100	13	45	61	6000	0.10	500
AMCI1608C2N2CT	2.2±0.3	8	100	13	45	60	6000	0.10	500
AMCI1608C2N7CT	2.7±0.3	10	100	13	44	55	6000	0.12	500
AMCI1608C3N3CT	3.3±0.3	10	100	13	43	50	6000	0.15	500
AMCI1608C3N9CT	3.9±0.3	10	100	13	43	50	6000	0.16	500
AMCI1608C4N7CT	4.7±0.3	10	100	13	43	50	6000	0.20	500
AMCI1608C5N6CT	5.6±0.3	10	100	14	42	48	5000	0.25	500
AMCI1608C6N8□T	6.8	10	100	14	43	50	5000	0.30	500
AMCI1608C8N2□T	8.2	10	100	14	43	48	4500	0.35	500
AMCI1608C10N□T	10	12	100	15	45	50	3500	0.40	300
AMCI1608C12N□T	12	12	100	18	48	50	3000	0.45	300
AMCI1608C15N□T	15	12	100	18	48	50	2300	0.50	300
AMCI1608C18N□T	18	12	100	16	48	51	2200	0.55	300
AMCI1608C22N□T	22	12	100	16	45	48	2000	0.60	300
AMCI1608C27N□T	27	12	100	16	45	45	1700	0.65	300
AMCI1608C33N□T	33	12	100	16	45	41	1500	0.70	300
AMCI1608C39N□T	39	12	100	17	40	48	1400	0.70	300
AMCI1608C47N□T	47	12	100	17	35	35	1200	0.70	300
AMCI1608C56N□T	56	12	100	17	35	30	1100	0.75	300
AMCI1608C68N□T	68	12	100	17	30	20	900	0.85	300
AMCI1608C82N□T	82	8	100	15	22	-	800	1.00	300
AMCI1608CR10□T	100	8	100	15	16	-	700	1.20	300
AMCI1608CR12□T*	120	8	50	15	-	-	600	1.40	200
AMCI1608CR15□T*	150	8	50	15	-	-	500	1.60	200
AMCI1608CR18□T*	180	8	50	15	-	-	400	1.90	200
AMCI1608CR22□T*	220	8	50	15	-	-	350	2.40	200
AMCI1608CR27□T*	270	8	50	16	-	-	350	2.60	150
AMCI1608CR33□T*	330	8	50	16	-	-	350	2.80	150
AMCI1608CR39□T*	390	8	50	16	-	-	300	3.20	150
AMCI1608CR43□T*	430	8	50	16	-	-	280	3.40	150
AMCI1608CR47□T*	470	8	50	15	-	-	250	3.60	150
AMCI1608CR56□T*	560	8	50	15	-	-	250	4.00	100
AMCI1608CR68□T*	680	8	50	15	-	-	250	4.50	100

※□: Please specify the inductance tolerance code (F=±5%, G=±10%). The product with tolerance less than ±F%, ±G% is also available. Please contact your local sales.
※*: The length: 1.65±0.15mm, for others: 1.60±0.15mm

TYPICAL ELECTRICAL CHARACTERISTICS

AMCI1005C TYPE



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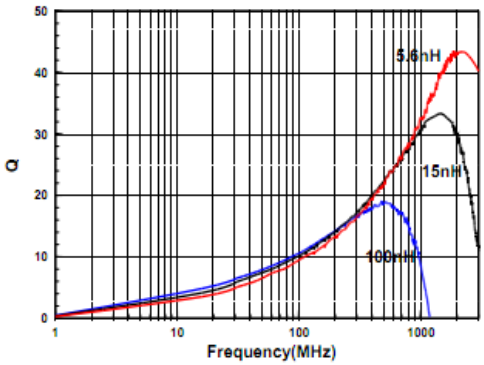
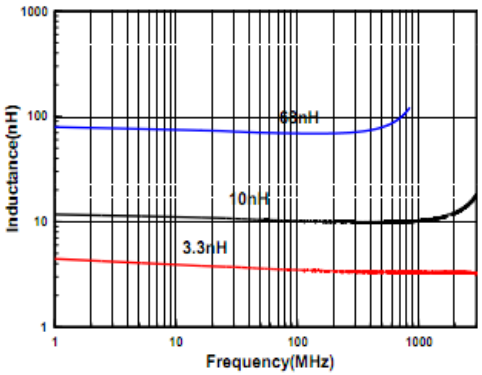


AMCI1608C TYPE



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