

CHIP FERRITE INDUCTORS

Features

1. Perfect for high density surface mount applications since magnetic shield eliminates crosstalk.
2. Highly reliable in wide temperature and humidity range. Superior Q characteristics in wide frequency.
3. Terminal electrode has excellent solder heat resistance.

Applications

1. Prevention of electromagnetic interference to signals on the secondary side of electronic equipment.

Ordering Information

F I - A 1 6 0 8 - 6 8 0 K J T
(1) (2) (3) (4) (5) (6) (7)

(1) Series

(2) Material & Design

(3) Dimensions

The first two digits: length (mm)
The last two digits: width (mm)

(4) Inductance

(5) Tolerance

J : $\pm 5\%$
K : $\pm 10\%$
M : $\pm 20\%$

(6) Termination

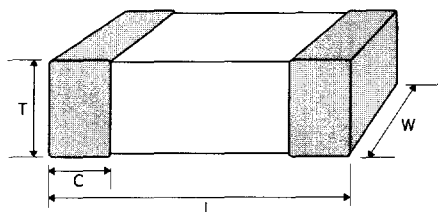
J : Nickel barrier

(7) Packing

B : Bulk Pack
T : Tape & Reel ($\varnothing$ 178mm [7 inches])
L : Tape & Reel ($\varnothing$ 254mm [10 inches])

Shape and Dimensions

unit: mm[inches]



Type	L	W	T	C(max.)
FI-□1608-	1.6 ± 0.15 [.063 $\pm$.006]	0.8 ± 0.15 [.031 $\pm$.006]	0.8 ± 0.15 [.031 $\pm$.006]	0.5 [.019]
FI-□2012-	2.0 ± 0.2 [.079 $\pm$.008]	1.25 ± 0.2 [.049 $\pm$.008]	1.25 ± 0.2 [.049 $\pm$.008]	0.6 [.024]
FI-□3216-	3.2 ± 0.2 [.126 $\pm$.008]	1.6 ± 0.2 [.063 $\pm$.008]	1.3 ± 0.2 [.051 $\pm$.008]	0.7 [.028]

Specifications

FI1608

Part No.	Inductance		Q		L,Q test frequency (MHz)	SRF(MHz)		DCR(mΩ)		Rated Current (mA) max.
	μH	Tolerance	min.	typ.		min.	typ.	max.	typ.	
FI-A1608-270□□□	0.027	±10% ±20%	10	45	50	260	350	90	60	200
FI-A1608-470□□□	0.047		10	45	50	260	320	150	100	200
FI-A1608-560□□□	0.056		10	45	50	255	300	200	90	200
FI-A1608-680□□□	0.068		10	45	50	250	290	200	90	200
FI-A1608-820□□□	0.082		10	45	50	245	280	250	120	200
FI-A1608-101□□□	0.10	±5% ±10% ±20%	15	30	25	240	270	250	140	200
FI-A1608-121□□□	0.12		15	30	25	205	260	300	150	200
FI-A1608-151□□□	0.15		15	30	25	180	250	350	180	200
FI-A1608-181□□□	0.18		15	30	25	165	220	400	190	200
FI-A1608-221□□□	0.22		15	30	25	150	200	400	190	200
FI-A1608-271□□□	0.27		15	30	25	136	190	500	270	200
FI-A1608-331□□□	0.33		15	30	25	125	180	550	280	150
FI-A1608-391□□□	0.39		15	30	25	110	170	600	300	150
FI-A1608-471□□□	0.47		15	30	25	105	160	700	390	150
FI-A1608-561□□□	0.56		15	30	25	95	150	900	500	150
FI-A1608-681□□□	0.68		15	30	25	80	140	900	500	150
FI-A1608-821□□□	0.82		15	30	25	75	130	1600	800	100
FI-B1608-102□□□	1.0		35	50	10	70	95	500	250	100
FI-B1608-122□□□	1.2		35	50	10	60	80	600	250	100
FI-B1608-152□□□	1.5		35	50	10	55	70	650	300	50
FI-B1608-182□□□	1.8		35	50	10	50	70	750	350	50
FI-B1608-222□□□	2.2		35	50	10	45	60	900	450	50
FI-B1608-272□□□	2.7		35	50	10	40	55	1000	600	50

• SRF:Self-Resonant Frequency.

• DCR:DC Resistance

FI2012

Part No.	Inductance		Q		L,Q test frequency (MHz)	SRF(MHz)		DCR(mΩ)		Rated Current (mA) max.
	μH	Tolerance	min.	typ.		min.	typ.	max.	typ.	
FI-A2012-470□□□	0.047	±10% ±20%	20	60	50	320	400	100	50	300
FI-A2012-560□□□	0.056		20	60	50	300	380	150	80	300
FI-A2012-680□□□	0.068		20	60	50	280	350	200	80	300
FI-A2012-820□□□	0.082		20	60	50	255	320	200	80	300
FI-A2012-101□□□	0.10	±5% ±10% ±20%	25	50	25	235	300	200	90	250
FI-A2012-121□□□	0.12		25	50	25	220	280	200	65	250
FI-A2012-151□□□	0.15		25	50	25	200	250	200	60	250
FI-A2012-181□□□	0.18		25	50	25	185	230	200	100	250
FI-A2012-221□□□	0.22		25	50	25	170	220	250	100	250
FI-A2012-271□□□	0.27		25	50	25	150	200	300	150	250
FI-A2012-331□□□	0.33		25	50	25	145	180	300	150	250
FI-A2012-391□□□	0.39		30	50	25	135	170	400	190	200
FI-A2012-471□□□	0.47		30	50	25	125	160	400	190	200
FI-A2012-561□□□	0.56		30	50	25	115	150	400	280	150
FI-A2012-681□□□	0.68		30	50	25	105	135	500	300	150
FI-A2012-821□□□	0.82		30	50	25	100	125	600	350	150
FI-B2012-102□□□	1.0		45	75	10	75	105	300	120	100
FI-B2012-122□□□	1.2		45	75	10	65	95	400	140	100
FI-B2012-152□□□	1.5		45	75	10	60	85	400	140	100
FI-B2012-182□□□	1.8		45	75	10	55	75	400	160	100
FI-B2012-222□□□	2.2		45	80	10	50	70	400	200	50
FI-B2012-272□□□	2.7		45	80	10	45	65	500	250	50
FI-B2012-332□□□	3.3		45	80	10	40	55	500	270	50
FI-B2012-392□□□	3.9		45	80	10	38	50	1000	500	50
FI-B2012-472□□□	4.7		45	80	10	35	48	1400	700	50

• SRF:Self-Resonant Frequency.

• DCR:DC Resistance

Specifications

FI2012

Part No.	Inductance		Q		L, Q test frequency (MHz)	SRF(MHz)		DCR(mΩ)		Rated Current (mA) max.
	μH	Tolerance	min.	typ.		min.	typ.	max.	typ.	
FI-C2012-562□□□	5.6	± 5% ± 10% ± 20%	50	60	4	32	45	500	250	50
FI-C2012-682□□□	6.8		50	60	4	29	40	600	330	25
FI-C2012-822□□□	8.2		50	60	4	26	36	700	380	25
FI-C2012-103□□□	10.0		50	60	2	24	33	800	450	25
FI-C2012-123□□□	12.0		50	60	2	22	30	800	470	25
FI-C2012-153□□□	15.0		30	40	1	19	27	1500	750	15
FI-C2012-183□□□	18.0		30	40	1	18	25	1500	810	15
FI-D2012-223□□□	22.0		30	40	1	16	22	700	350	5
FI-D2012-273□□□	27.0		30	40	1	14	20	800	450	5
FI-D2012-333□□□	33.0		30	40	0.4	13	18	1000	600	5

· SRF: Self-Resonant Frequency.

· DCR: DC Resistance

FI3216

Part No.	Inductance		Q		L, Q test frequency (MHz)	SRF(MHz)		DCR(mΩ)		Rated Current (mA) max.
	μH	Tolerance	min.	typ.		min.	typ.	max.	typ.	
FI-A3216-470□□□	0.047	± 10% ± 20%	20	60	50	320	400	150	80	300
FI-A3216-560□□□	0.056		20	60	50	300	360	150	80	300
FI-A3216-680□□□	0.068		20	60	50	280	330	150	100	300
FI-A3216-820□□□	0.082		20	60	50	255	300	150	100	300
FI-A3216-101□□□	0.10	± 5% ± 10% ± 20%	25	50	25	235	280	200	100	250
FI-A3216-121□□□	0.12		25	50	25	220	260	200	100	250
FI-A3216-151□□□	0.15		25	50	25	200	240	200	100	250
FI-A3216-181□□□	0.18		25	50	25	185	220	200	100	250
FI-A3216-221□□□	0.22		25	50	25	170	200	250	120	250
FI-A3216-271□□□	0.27		25	50	25	150	180	250	120	250
FI-A3216-331□□□	0.33		25	50	25	145	170	300	130	250
FI-A3216-391□□□	0.39		30	50	25	135	160	300	150	200
FI-A3216-471□□□	0.47		30	50	25	125	145	300	150	200
FI-A3216-561□□□	0.56		30	50	25	115	135	350	170	150
FI-A3216-681□□□	0.68		30	50	25	105	125	350	250	150
FI-A3216-821□□□	0.82		30	50	25	100	115	400	300	150
FI-B3216-102□□□	1.0		45	80	10	75	90	250	130	100
FI-B3216-122□□□	1.2		45	80	10	65	80	300	150	100
FI-B3216-152□□□	1.5		45	80	10	60	70	300	170	50
FI-B3216-182□□□	1.8		45	80	10	55	66	500	250	50
FI-B3216-222□□□	2.2		45	80	10	50	58	600	300	50
FI-B3216-272□□□	2.7		45	80	10	45	53	600	300	50
FI-B3216-332□□□	3.3		45	85	10	40	49	700	350	50
FI-B3216-392□□□	3.9		45	85	10	38	45	800	400	50
FI-B3216-472□□□	4.7		45	85	10	35	41	800	400	50
FI-C3216-562□□□	5.6	± 5% ± 10% ± 20%	50	65	4	32	38	600	300	50
FI-C3216-682□□□	6.8		50	65	4	29	34	600	300	50
FI-C3216-822□□□	8.2		50	65	4	26	31	600	330	50
FI-C3216-103□□□	10.0		50	65	2	24	28	700	380	50
FI-C3216-123□□□	12.0		50	65	2	22	26	900	450	25
FI-C3216-153□□□	15.0		35	45	1	19	23	1100	550	25
FI-C3216-183□□□	18.0		35	45	1	18	21	1500	800	25
FI-C3216-223□□□	22.0		35	45	1	16	19	1500	800	25
FI-C3216-273□□□	27.0		35	45	1	14	17	1500	800	25
FI-C3216-333□□□	33.0		35	45	0.4	13	16	1600	850	25

· SRF: Self-Resonant Frequency.

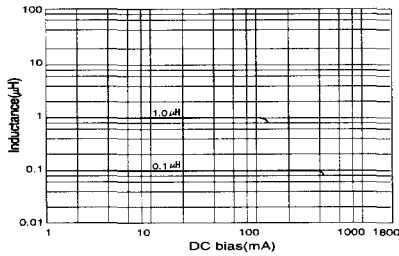
· DCR: DC Resistance

* Test equipment : HP4191A + HP16092A

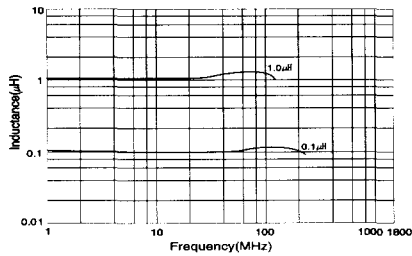
Electrical Characteristics

1608

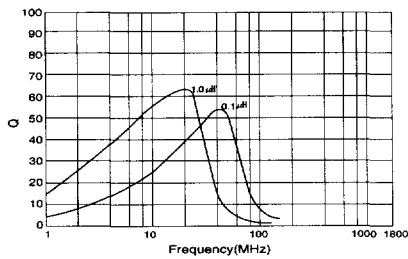
DC bias characteristics



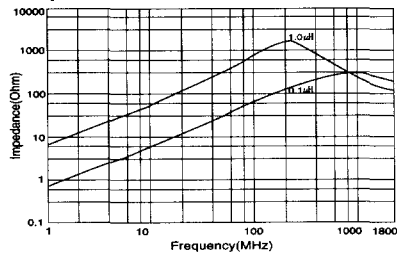
Inductance characteristics



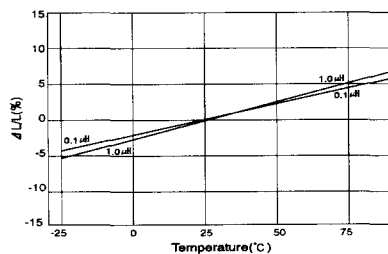
Q characteristics



Impedance characteristics

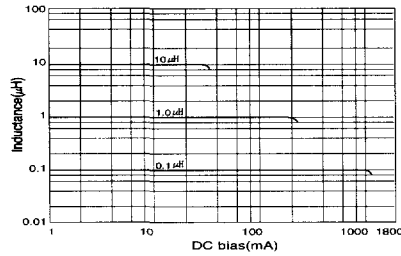


Temperature characteristics

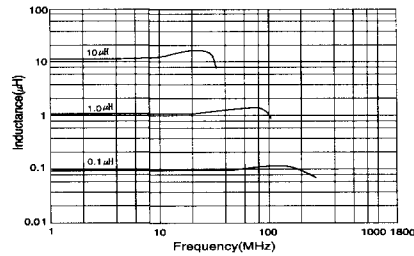


2012

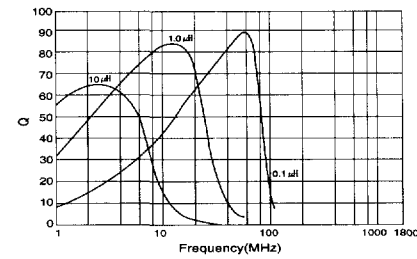
DC bias characteristics



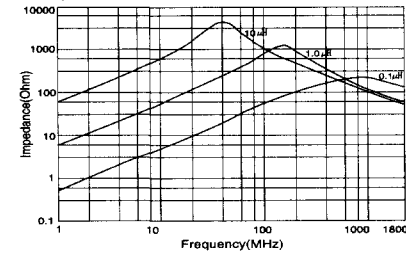
Inductance characteristics



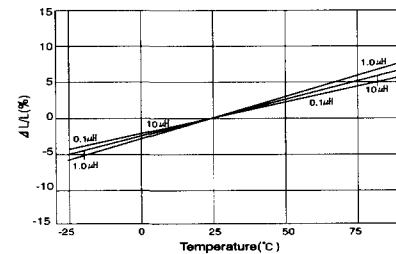
Q characteristics



Impedance characteristics

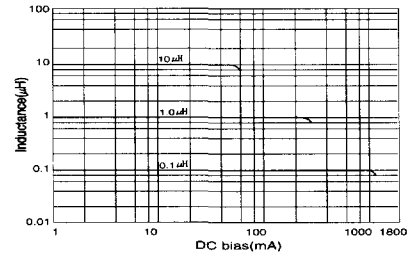


Temperature characteristics

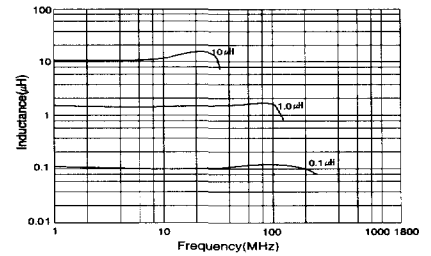


3216

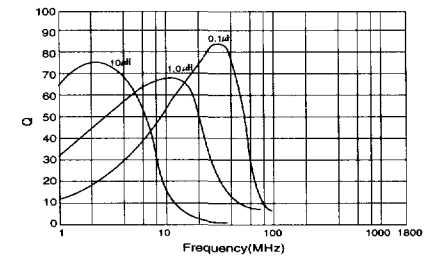
DC bias characteristics



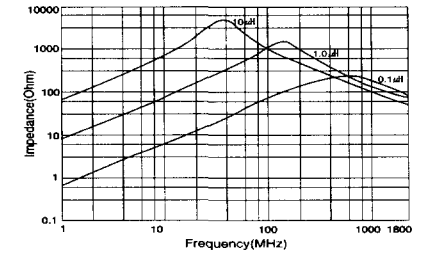
Inductance characteristics



Q characteristics



Impedance characteristics



Temperature characteristics

