

## Chip Ferrite Inductors

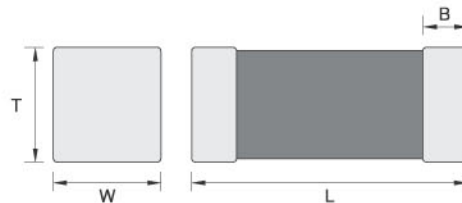
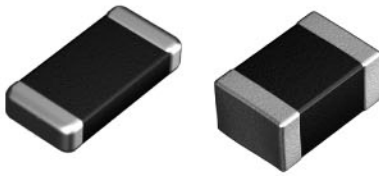
### Features

1. Good Reliability(Monolithic Structure)
2. Magnetically Shielded Structure
3. High Q, Stable Inductance in Wide Frequency
4. Flow/Reflow Solder Application

### Applications

1. Computer and its Peripherals
2. Hard-disk Drivers
3. Audio/Visual Equipment
4. Telecommunication Equipment

### Shape & Dimensions



(Unit : mm)

Model	L	W	T	B
CM1608	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
CM2012	2.0±0.2	1.25±0.2	0.85±0.2 1.25±0.2	0.5±0.3

### How to Order(Product Identification)

**CM 1608 F R22 K T**



#### 1 Series Code

CM : Chip Ferrite Inductors

#### 2 Dimension Code

The first two digits : Length(mm)

The last two digits : Width(mm)

#### 3 Material Code

F : Ferrite

#### 4 Inductance Value Code

N47 = 0.47nH

3N3 = 3.3nH

56N = 56nH

R22 = 0.22 $\mu$ H

#### 5 Tolerance Code

S( $\pm 0.3$ nH) J( $\pm 5\%$ )

K( $\pm 10\%$ ) M( $\pm 20\%$ )

#### 6 Package Code

T : Reel paper packaging

E : Reel embossed tape packaging

B : Bulk packaging

# Specifications

## CM 1608 Series

Part No.	Inductance		Q Min.	Test Frequency (MHz)	SRF(MHz) Min.	DC Resistance ( $\Omega$ ) Max.	Rate Current (mA) Max.	T (mm)	
	( $\mu$ H)	Tolerance							
CM1608F47N	0.047	±20%	10	50	260	0.30	50	0.8±0.15	
CM1608F68N	0.068		10	50	250	0.30	50		
CM1608F82N	0.082		10	50	245	0.30	50		
CM1608FR10	0.10	±20%	15	25	240	0.50	50		
CM1608FR12	0.12		15	25	205	0.50	50		
CM1608FR15	0.15		15	25	180	0.60	50		
CM1608FR18	0.18		15	25	165	0.60	50		
CM1608FR22	0.22		15	25	150	0.80	50		
CM1608FR27	0.27		15	25	136	0.80	50		
CM1608FR33	0.33		15	25	125	0.85	35		
CM1608FR39	0.39		15	25	110	1.00	35		
CM1608FR47	0.47		15	25	105	1.35	35		
CM1608FR56	0.56		15	25	95	1.55	35		
CM1608FR68	0.68		15	25	80	1.70	35		
CM1608FR82	0.82		15	25	75	2.10	35		
CM1608F1R0	1.0		±10%	35	10	70	0.60		25
CM1608F1R2	1.2			35	10	60	0.80		25
CM1608F1R5	1.5			35	10	55	0.80		25
CM1608F1R8	1.8			35	10	50	0.95		25
CM1608F2R2	2.2			35	10	45	1.15		15
CM1608F2R7	2.7	35		10	40	1.35	15		
CM1608F3R3	3.3	35		10	38	1.55	15		
CM1608F3R9	3.9	35		10	36	1.70	15		
CM1608F4R7	4.7	35		10	33	2.10	15		
CM1608F5R6	5.6	35		4	22	1.55	5		
CM1608F6R8	6.8	35	4	20	1.70	5			
CM1608F8R2	8.2	35	4	18	2.10	5			
CM1608F100	10	35	2	17	2.55	5			
CM1608F120	12	35	2	15	2.75	5			
CM1608F150	15	±20%	20	1	14	1.70	1		
CM1608F180	18		20	1	13	1.85	1		
CM1608F220	22		20	1	11	2.10	1		
CM1608F270	27		20	1	10	2.75	1		
CM1608F330	33		20	1	9	2.95	1		

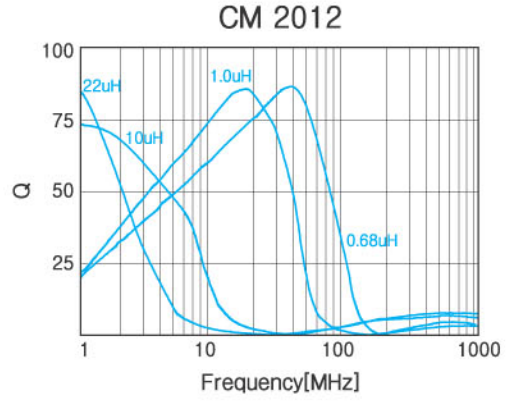
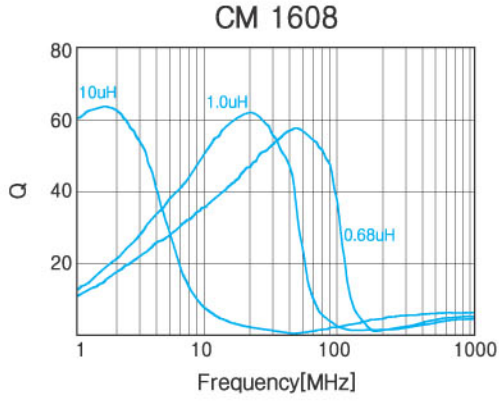
## Specifications

### CM 2012 Series

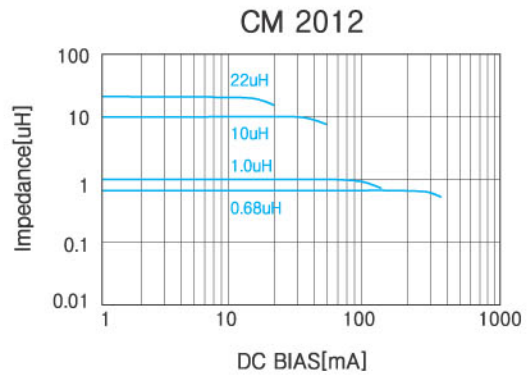
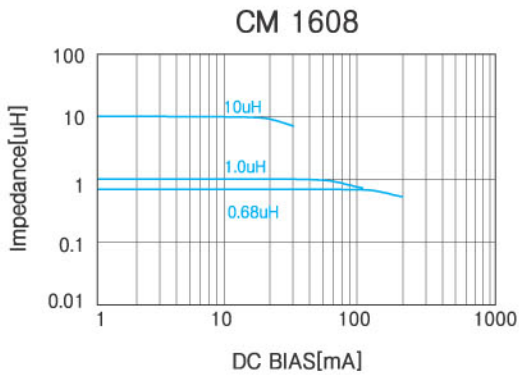
Part No.	Inductance		Q Min.	Test Frequency (MHz)	SRF(MHz) Min.	DC Resistance ( $\Omega$ ) Max.	Rated Current (mA) Max.	T (mm)
	( $\mu$ H)	Tolerance						
CM2012F47N	0.047	±20%	15	50	320	0.20	300	
CM2012F68N	0.068		15	50	280	0.20	300	
CM2012F82N	0.082		15	50	255	0.20	300	
CM2012FR10	0.10	±20%	20	25	235	0.30	250	0.8±0.2
CM2012FR12	0.12		20	25	220	0.30	250	
CM2012FR15	0.15		20	25	200	0.40	250	
CM2012FR18	0.18		20	25	185	0.40	250	
CM2012FR22	0.22		20	25	170	0.50	250	
CM2012FR27	0.27		20	25	150	0.50	250	
CM2012FR33	0.33		20	25	145	0.55	250	
CM2012FR39	0.39		25	25	135	0.65	200	
CM2012FR47	0.47		25	25	125	0.65	200	
CM2012FR56	0.56		25	25	115	0.75	150	
CM2012FR68	0.68	±20%	25	25	105	0.80	150	1.25±0.2
CM2012FR82	0.82		25	25	100	1.00	150	
CM2012F1R0	1.0		45	10	75	0.40	50	
CM2012F1R2	1.2		45	10	65	0.50	50	
CM2012F1R5	1.5		45	10	60	0.50	50	
CM2012F1R8	1.8		45	10	55	0.60	50	
CM2012F2R2	2.2		45	10	50	0.65	30	
CM2012F2R7	2.7		45	10	45	0.75	30	
CM2012F3R3	3.3		45	10	41	0.80	30	
CM2012F3R9	3.9		45	10	38	0.90	30	
CM2012F4R7	4.7	±10%	45	10	35	1.00	30	1.25±0.2
CM2012F5R6	5.6		50	4	32	0.90	15	
CM2012F6R8	6.8		50	4	29	1.00	15	
CM2012F8R2	8.2		50	4	26	1.10	15	
CM2012F100	10		50	2	24	1.15	15	
CM2012F120	12		50	2	22	1.25	15	
CM2012F150	15		30	1	19	0.80	5	
CM2012F180	18		30	1	18	0.90	5	
CM2012F220	22		30	1	16	1.10	5	
CM2012F270	27		30	1	14	1.15	5	
CM2012F330	33	30	0.4	13	1.25	5		

# Electrical Characteristics

## Q Characteristics



## DC Bias Characteristics



## Temperature Characteristics

