

# Chip Ceramic Inductors

## Features

1. Good Reliability(Monolithic Structure)
2. High Q, Stable Inductance In High Frequency
3. Flow/Reflow Solder Application

## Applications

1. PHS, CDMA, PCS, GSM
2. Telecommunications

## Product Identification

CD 1608 C 22N J T

### Series Code

CD : Chip Ceramic Inductors

### Dimension Code

The first two digits : length(mm)

The last two digits : width(mm)

### Material Code

C : Ceramic

### Inductance Value Code

N47 = 0.47 nH      3N3 = 3.3 nH

56 N = 56 nH      R22 = 0.22  $\mu$  H

### Tolerance Code

S ( $\pm$  0.3nH) J ( $\pm$  5%) K ( $\pm$  10%) M ( $\pm$  20%)

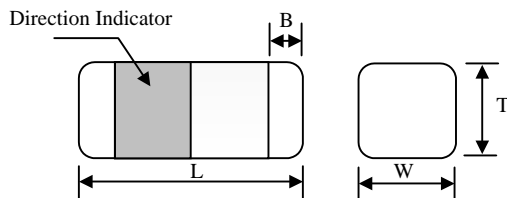
### Package Code

B : Bulk pack

T : Tape & Reel pack

E : Embossed tape pack

## Shape & Dimensions



(Unit:mm)

Model	L	W	T	B
CD 1005	1.0 $\pm$ 0.1	0.5 $\pm$ 0.1	0.5 $\pm$ 0.1	0.25 $\pm$ 0.1
CD 1608	1.6 $\pm$ 0.15	0.8 $\pm$ 0.15	0.8 $\pm$ 0.15	0.3 $\pm$ 0.2
CD 2012	2.0 $\pm$ 0.2	1.25 $\pm$ 0.2	0.85 $\pm$ 0.2	0.5 $\pm$ 0.3



## Specifications

- CD 1005 series -

Part Number	Inductance		Q	Test Frequency	SRF	DC Resistance	Rated Current		
	Nominal value [nH]	Tolerance	min.	[MHz]	[MHz] min.	[ ] max.	[mA] max.		
CD1005C1N2S	1.2	± 0.3 nH	8	100	4000	0.12	300		
CD1005C1N5S	1.5								
CD1005C1N8S	1.8								
CD1005C2N2S	2.2								
CD1005C2N7S	2.7								
CD1005C3N3K	3.3	± 10%				3900		0.32	250
CD1005C3N9K	3.9								
CD1005C4N7K	4.7								
CD1005C5N6K	5.6					3600		0.37	
CD1005C6N8K	6.8								
CD1005C8N2K	8.2								
CD1005C10NK	10				3200	0.42	2700	0.50	
CD1005C12NK	12								
CD1005C15NK	15								
CD1005C18NK	18	2300			0.55	2100	0.65		
CD1005C22NK	22								
CD1005C27NK	27								
CD1005C33NK	33	1900	0.80	1600	0.90				
CD1005C39NJ(K)	39								
CD1005C47NJ(K)	47								
CD1005C56NJ(K)	56	± 5% or ± 10%	1300	1.00	1200	1.20			
CD1005C39NJ(K)	39								
CD1005C47NJ(K)	47	± 5% or ± 10%	1000	1.30	1000	1.30			
CD1005C56NJ(K)	56								
CD1005C56NJ(K)	56	± 5% or ± 10%	750	1.40	750	1.40			
CD1005C56NJ(K)	56								

# Chip Ceramic Inductors

## Specifications

- CD 1608 series -

Part Number	Inductance		Q	Test Frequency	SRF	DC Resistance	Rated Current
	Nominal value [nH]	Tolerance	min.	[MHz]	[MHz] min.	[ ] max.	[mA] max.
CD1608C1N2S	1.2	± 0.3 nH	8	100	6000	0.10	300
CD1608C1N5S	1.5						
CD1608C1N8S	1.8						
CD1608C2N2S	2.2		10			0.15	
CD1608C2N7S	2.7						
CD1608C3N3S	3.3						
CD1608C3N9S	3.9				0.20		
CD1608C4N7S	4.7						
CD1608C5N6S	5.6						
CD1608C6N8J(K)	6.8	± 5% or ± 10%	12		5000	0.25	
CD1608C8N2J(K)	8.2				4000		
CD1608C10NJ(K)	10				3500	0.30	
CD1608C12NJ(K)	12		3000		0.35		
CD1608C15NJ(K)	15		2800		0.40		
CD1608C18NJ(K)	18		2600		0.45		
CD1608C22NJ(K)	22		2300		0.50		
CD1608C27NJ(K)	27		2000		0.55		
CD1608C33NJ(K)	33		1700		0.60		
CD1608C39NJ(K)	39		1500	0.65			
CD1608C47NJ(K)	47	1200	0.70				
CD1608C56NJ(K)	56	1100	0.75				
CD1608C68NJ(K)	68	1000	0.80				
CD1608C82NJ(K)	82	900	0.85				
CD1608CR10J(K)	100	800	0.90				



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## Specifications

- CD 1608 series -

Part Number	Inductance		Q	Test Frequency	SRF	DC Resistance	Rated Current
	Nominal value [nH]	Tolerance	min.	[MHz]	[MHz] min.	[ ] max.	[mA] max.
CD1608CR12J(K)	120	± 5% or ± 10%	8	100	500	1.20	300
CD1608CR15J(K)	150						
CD1608CR18J(K)	180				400	1.30	
CD1608CR22J(K)	220					1.50	



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## Specifications

- CD 2012 series -

Part Number	Inductance		Q	Test Frequency	SRF	DC Resistance	Rated Current
	Nominal value [nH]	Tolerance	min.	[MHz]	[MHz] min.	[ ] max.	[mA] max.
CD2012C1N5S	1.5	± 0.3 nH	10	100	4000	0.10	300
CD2012C1N8S	1.8						
CD2012C2N2S	2.2						
CD2012C2N7S	2.7						
CD2012C3N3S(K)	3.3	± 10 % or ± 0.3 nH	12		3500	0.13	
CD2012C3N9S(K)	3.9					0.15	
CD2012C4N7S(K)	4.7					0.20	
CD2012C5N6S(K)	5.6					0.23	
CD2012C6N8J(K)	6.8	± 5 % or ± 10 %	15		2800	0.25	
CD2012C8N2J(K)	8.2				2400	0.28	
CD2012C10NJ(K)	10				2100	0.30	
CD2012C12NJ(K)	12				1900	0.35	
CD2012C15NJ(K)	15				1600	0.40	
CD2012C18NJ(K)	18				1500	0.45	
CD2012C22NJ(K)	22				1400	0.50	
CD2012C27NJ(K)	27				1300	0.55	
CD2012C33NJ(K)	33				1200	0.60	
CD2012C39NJ(K)	39				1000	0.65	
CD2012C47NJ(K)	47	18	900		0.70		
CD2012C56NJ(K)	56		800		0.75		
CD2012C68NJ(K)	68		700	0.80			
CD2012C82NJ(K)	82		600	0.90			
CD2012CR10J(K)	100						



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## Specifications

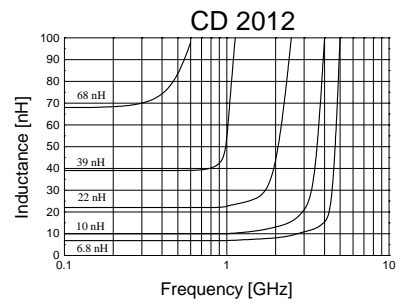
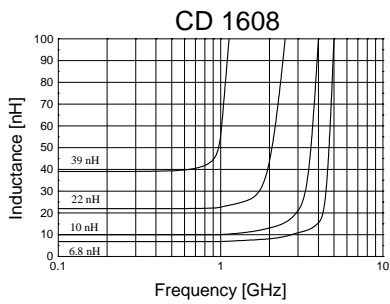
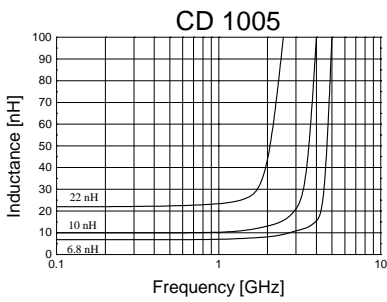
- CD 2012 series -

Part Number	Inductance		Q	Test Frequency	SRF	DC Resistance	Rated Current
	Nominal value [nH]	Tolerance	min.	[MHz]	[MHz] min.	[ ] max.	[mA] max.
CD2012CR12J(K)	120	± 5% or ± 10%	13	50	500	0.95	300
CD2012CR15J(K)	150					1.0	
CD2012CR18J(K)	180					1.1	
CD2012CR22J(K)	220		12		350	1.2	
CD2012CR27J(K)	270				300	1.3	
CD2012CR33J(K)	330				10	250	
CD2012CR39J(K)	390		1.3				
CD2012CR47J(K)	470		200			1.5	

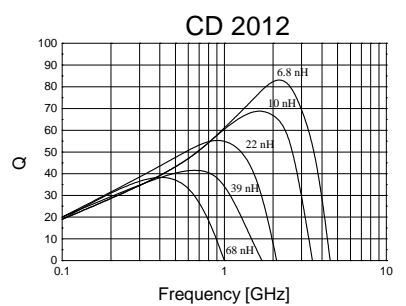
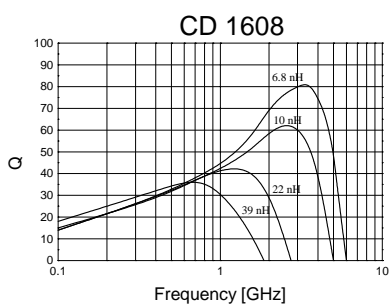
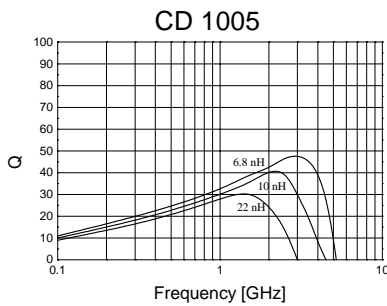


## Electrical Characteristics

### • Inductance Characteristics



### • Q Characteristics



### • Impedance Characteristics

