

## HC Series



Due to accurate wire winding technology, these chip inductors are designed for filtering, impedance matching, resonance and choke circuits for RF designer. Both standard series custom designs are available.

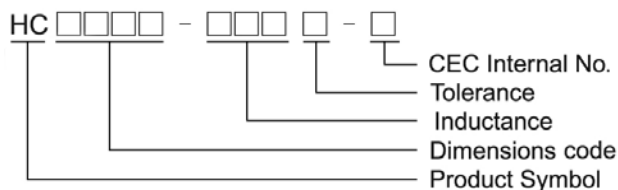
### Features

- RoHS compliant
- Ceramic body and wire wound construction provide highest SRFs
- Exceptional Q values even at high frequencies
- Highest possible SRFs as well as excellent Q values
- The non-magnetic coil form assures utmost thermal stability, predictability and batch consistency
- The high current rating and low loss to fit the RF applications

### Applications

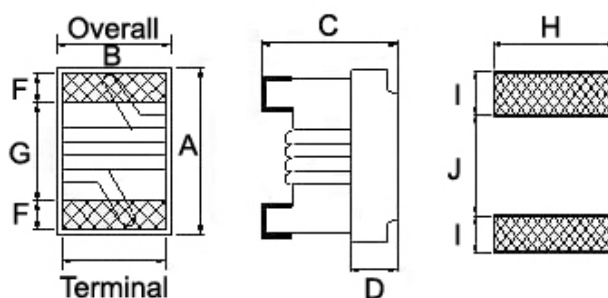
- RF products for cellular phone
- GPS receiver
- Base Station
- Repeater
- Wireless LAN/ mouse/ keyboard/ earphone
- Remote control
- Security system and other RF modules

### Product Identification



### Shape and Dimensions/ Recommended Pattern

#### HC0603



#### Dimensions

		A Max	B Max	C Max	D	E	F	G	H	I	J
HC0603	inch	0.071	0.049	0.04	0.015	0.030	0.013	0.034	0.040	0.025	0.025
	mm	1.80	1.25	1.02	0.38	0.76	0.33	0.86	1.02	0.64	0.64

## Electrical Characteristics

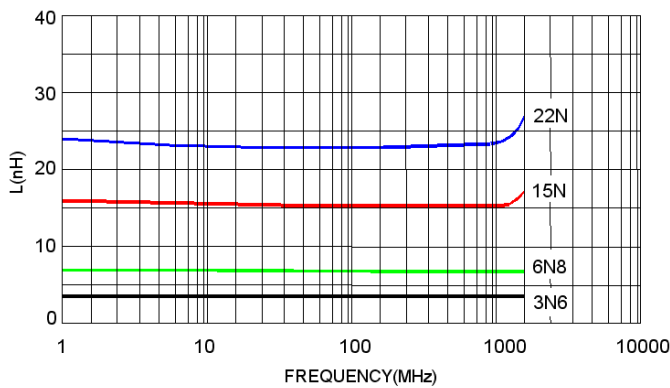
Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (MHz)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Irms (mA) Max	Color
HC0603-1N6□-S	1.6	10 / 5	250	24	250	12500	0.030	2400	Black
HC0603-3N6□-S	3.6	10 / 5	250	24	250	5900	0.048	2300	Brown
HC0603-3N9□-S	3.9	10 / 5	250	25	250	5900	0.054	2200	Red
HC0603-6N8□-S	6.8	10 / 5	250	35	250	5800	0.054	2100	Orange
HC0603-7N5□-S	7.5	10 / 5	250	35	250	3700	0.059	2100	Yellow
HC0603-8N2□-S	8.2	10 / 5	250	38	250	3700	0.071	2000	Brown
HC0603-10N□-S	10.0	10 / 5	250	38	250	3700	0.071	2000	Green
HC0603-12N□-S	12.0	10 / 5 / 2	250	38	250	3000	0.075	2000	Blue
HC0603-15N□-S	15.0	10 / 5 / 2	250	38	250	2800	0.080	1900	Violet
HC0603-18N□-S	18.0	10 / 5 / 2	250	40	250	2800	0.099	1900	Gray
HC0603-22N□-S	22.0	10 / 5 / 2	250	42	250	2400	0.099	1800	White
HC0603-24N□-S	24.0	10 / 5 / 2	250	42	250	2400	0.105	1800	Black

**Note:** When ordering, please specify tolerance code. Tolerance : G=±2% , J=±5% , K=±10%

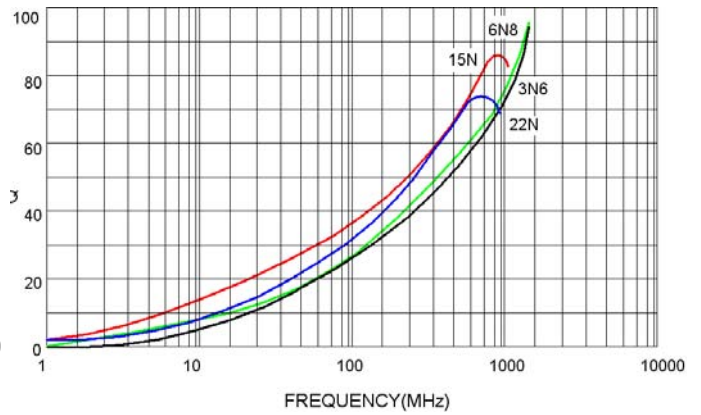
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- I rms for a 20°C temperature rise from 25°C ambient with current
- Measure Equipment :  
 L & Q : Agilent E4991A+Agilent HP16197A  
 SRF : Agilent HP8753D  
 RDC : HP4338B or CHEN HWA 502  
 I rms : HP4284A+HP42841A/HP4285A+HP42841A

## Test Instruments : Agilent E4991A Material/Impedance Analyzer

Typical L vs. Frequency

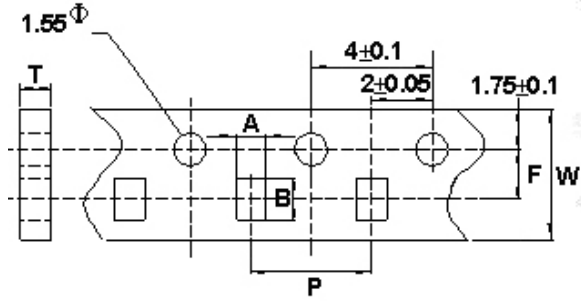


Typical Q vs. Frequency

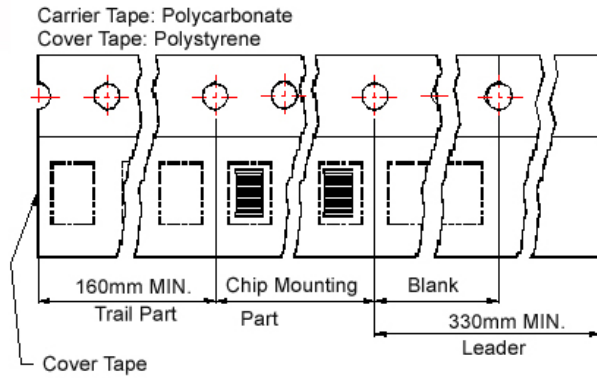


Packaging Specifications

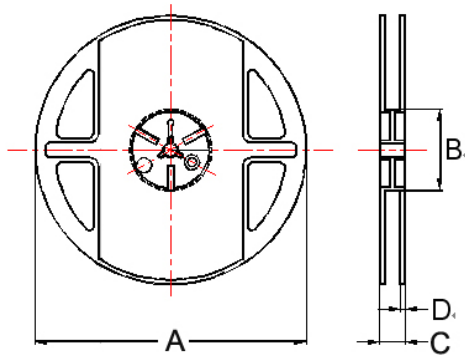
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions						Reel Dimensions				Quantity
	A	B	T	W	P	F	A	B	C	D	PCS / REEL
HC0603	1.20	1.80	0.97	8	4	3.5	178	60	12	1.5	4000