

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.

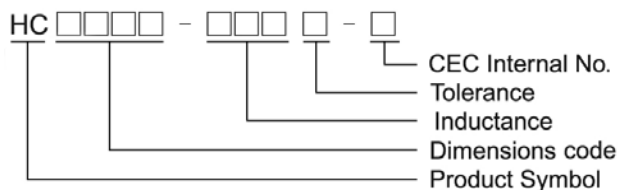
Features

- 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

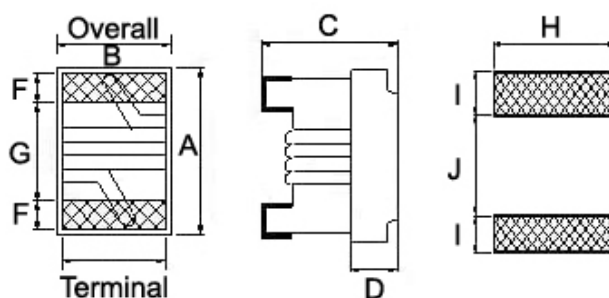
- RF products for cellular phone
- GPS receiver
- Base Station
- Repeater
- Wireless LAN/ mouse/ keyboard/ earphone
- Remote control
- Security system and other RF modules

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

SMD Wire Wound Ceramic Chip Inductors – HC Series

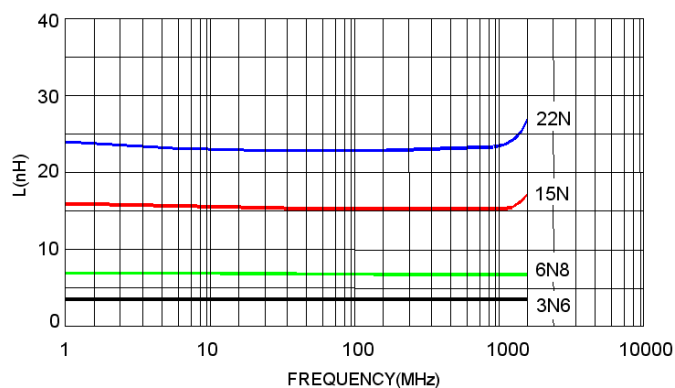
Electrical Characteristics

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

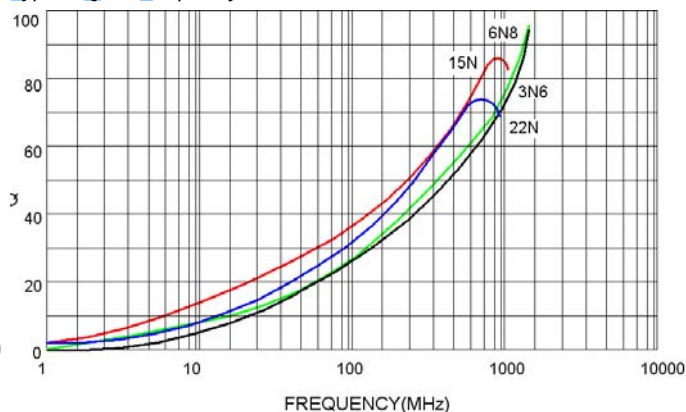
- When ordering, please specify tolerance and packaging codes.
- Tolerance : G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$
- L / Q: Agilent E4991A + Agilent HP16197A
- SRF: Agilent HP8753D
- RDC: CH502BC/ HP4338B
- Irms for a 20°C rise above 25°C ambient.
- Operating temperature range from -40°C to 125°C. (Including self - temperature rise)

Test Instruments : Agilent E4991A Material/Impedance Analyzer

Typical **L** vs. **F** Frequency



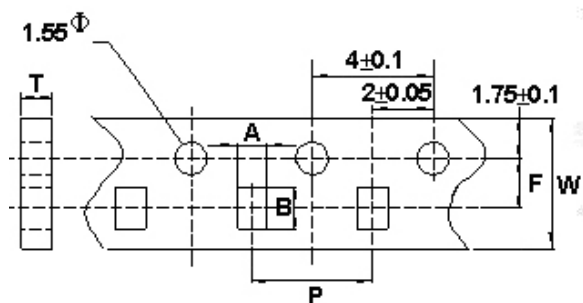
Typical **Q** vs. **F** Frequency



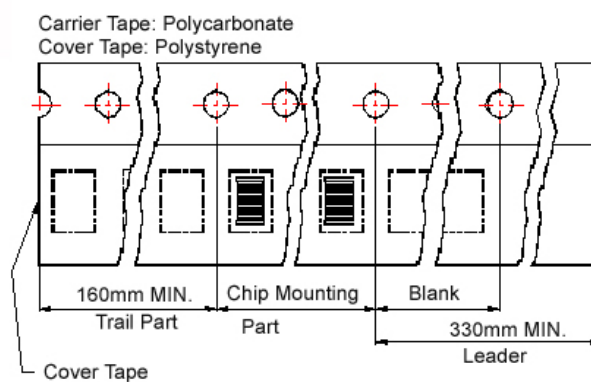
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Packaging Specifications

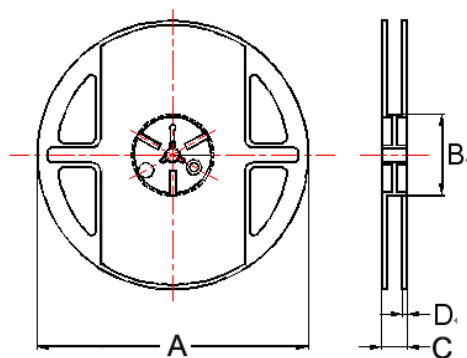
Tape Dimensions



Tape Material



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions						Reel Dimensions				Quantity PCS / REEL
	A	B	T	W	P	F	A	B	C	D	
HC0603	1.16	1.85	0.95	8	4	3.5	178	60	12	1.5	4000