

HC Series



Due to technical expertise of accurately winding skill, these chip inductors are designed as filtering, impedance matching, resonance and choke circuits for RF designer. The stand series as well as customer design to meet your needs of telecom & wireless products.

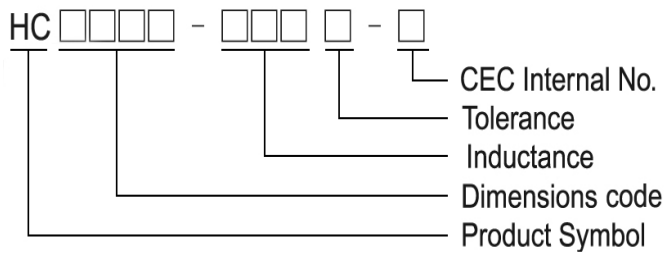
Features

- RoHS compliant
- Ceramic body and wire wound construction provide highest SRFs.
- These ultra – compact inductors provided exceptional Q values, even at high frequencies.
- Their ceramic construction delivers the highest possible SRFs as well as excellent Q values.
- The non-magnetic coil form also assures the utmost in thermal stability, predictability and batch consistency.
- The high current rating and low loss to fit the RF applications.

Applications

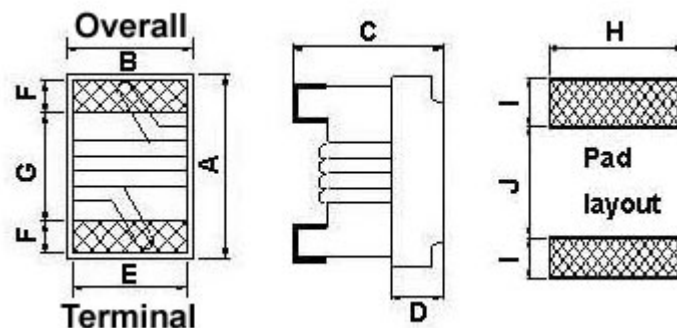
RF products for cellular phone, GPS receiver, Base Station, Repeater, Wireless LAN/ Mouse/ Keyboard/ earphone, remote control, security system and other RF modules.

Product Identification



Shapes 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

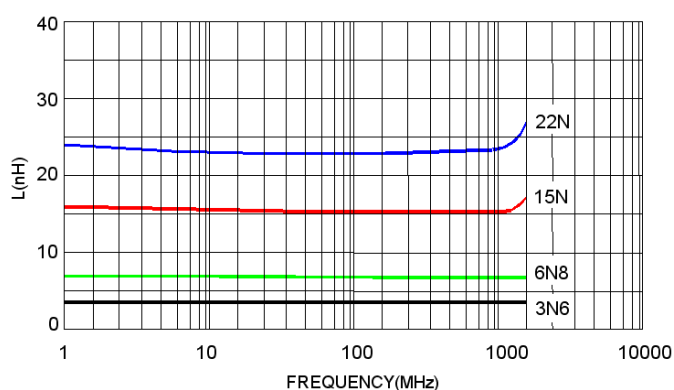
Electrical Characteristics

Part Number	Inductance (nH)	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

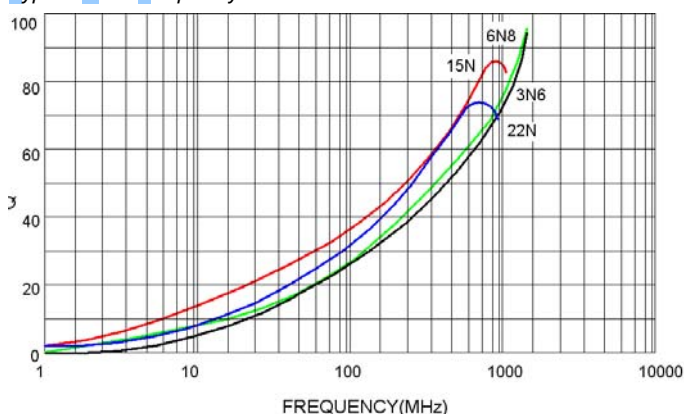
- When ordering, please specify tolerance and packaging codes.
- Tolerance : G = ±2% , J = ±5% , K = ±10%
- L /Q: Aiglent/HP4291A+ Aiglent/HP16197A
- SRF: Aiglent/HP8753D
- RDC: CH502BC/ HP4338B
- Irms for a 20℃ rise above 25℃ ambient.
- Operating temperature range from -40℃ to 125℃ . (Including self - temperature rise)

Test Instruments : HP4291A Material/Impedance Analyzer

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

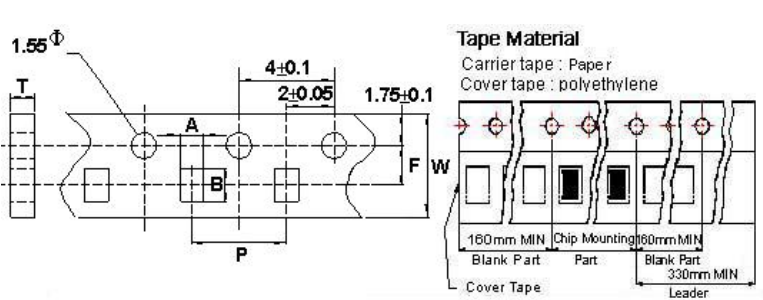


Typical **Q** vs. **F** Frequency

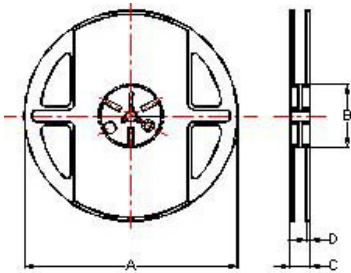


Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions						Reel Dimensions				Quantity PCS / REEL
	A	B	T	W	P	F	A	B	C	D	
HC0603	1.3	2.0	0.97	8	4	3.5	178	60	12	1.5	4000