

# HC Series

Lead-free / For High Current

## Wire Wound Ceramic Chip Inductors

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.

### APPLICATIONS

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

### FEATURES

Meet SONY SS-00259's criteria for lead-free product.

Ceramic body and wire wound construction provide highest SRFs.

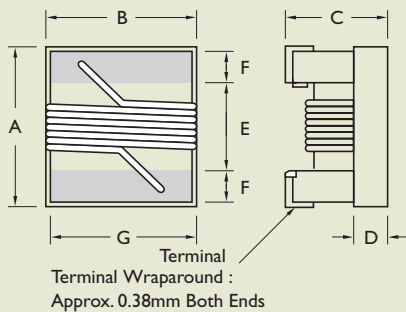
These ultra-compact inductors provided exceptional Q values, even at high frequencies.

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.

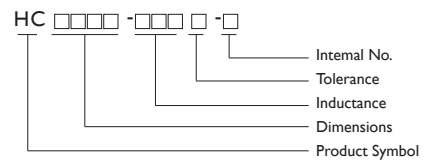
### SHAPES AND DIMENSIONS



TYPE	A	B	C	D	E	F	G
HC0603	1.80 <sup>+0</sup>	1.12 <sup>+0</sup>	1.02 <sup>+0</sup>	0.35Ref	0.86	0.33	0.76



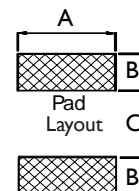
### PRODUCT IDENTIFICATION



• Tolerance :G=±2%, J=±5%, K=±10%

### RECOMMENDED PATTERN

Dimensions : mm



TYPE	A	B	C
HC0603	1.02	0.64	0.64



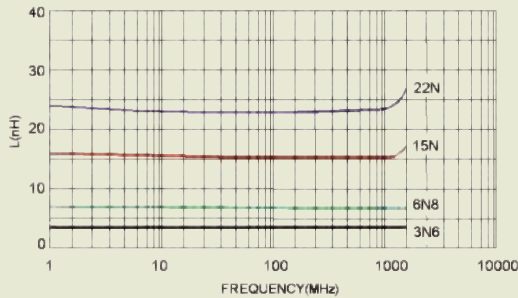
## ELECTRICAL CHARACTERISTICS : LEAD-FREE & ROHS COMPLIANCE

PART NO.	Inductance (nH)	Test Frequency (Mhz)	Tolerance (±%)	Q Min	Test Frequency (Mhz)	SRF Min (Mhz)	RDC MAX (Ω)	Irms Max (mA)	Color
HC0603-1N6 □ -N	1.6	250	10/5	24	250	12500	0.030	2400	Black
HC0603-3N6 □ -N	3.6	250	10/5	24	250	5900	0.048	2300	Brown
HC0603-3N9 □ -N	3.9	250	10/5	25	250	5900	0.054	2200	Red
HC0603-6N8 □ -N	6.8	250	10/5	35	250	5800	0.054	2100	Orange
HC0603-7N5 □ -N	7.5	250	10/5	35	250	3700	0.059	2100	Yellow
HC0603-10N □ -N	10.0	250	10/5/2	38	250	3700	0.071	2000	Green
HC0603-12N □ -N	12.0	250	10/5/2	38	250	3000	0.075	2000	Blue
HC0603-15N □ -N	15.0	250	10/5/2	38	250	2800	0.080	1900	Violet
HC0603-18N □ -N	18.0	250	10/5/2	40	250	2800	0.099	1900	Gray
HC0603-22N □ -N	22.0	250	10/5/2	42	250	2400	0.099	1800	White
HC0603-24N □ -N	24.0	250	10/5/2	42	250	2400	0.105	1800	Black

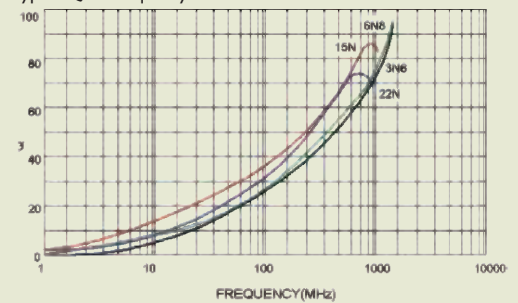
- Tolerance : G =±2% , J =±5% , K =±10%
- Packaging : Clear Tape and Reel (Standard)
- L/Q : Agilent / HP4291A+Agilent / HP16193A
- SRF : Agilent/HP8753D
- RDC : Digital Multimeter SC-7401
- Irms for a 15°C rise above 25°C ambient
- Operating Temperature Range from -40°C to 125°C

## TEST INSTRUMENTS : HP4291A MATERIAL / IMPEDANCE ANALYZER

Typical L vs Frequency

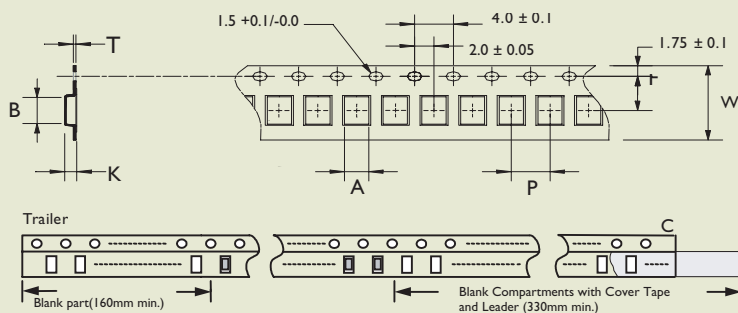


Typical Q vs Frequency

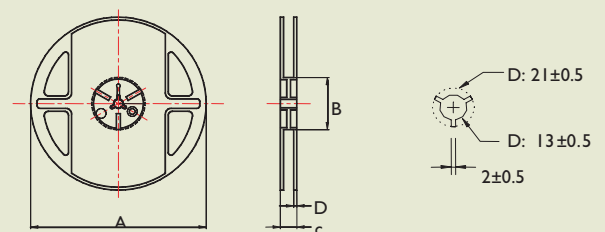


## PACKAGING SPECIFICATIONS

Tape Dimensions



Reel Dimensions



Dimensions : mm

TYPE	TAPE DIMENSIONS							REEL DIMENSIONS				QUANTITY/REEL
	A	B	T	W	P	F	K	A	B	C	D	
HC0603	1.15	1.83	0.23	8	4	3.5	1.00	178	60	12	1.5	4000



## RECOMMEND SOLDERING CONDITIONS

for: CS/ CT/ LCN/ HC/ HQ/ CMM/ NL (open type)/ NLC (open type)/ LS

