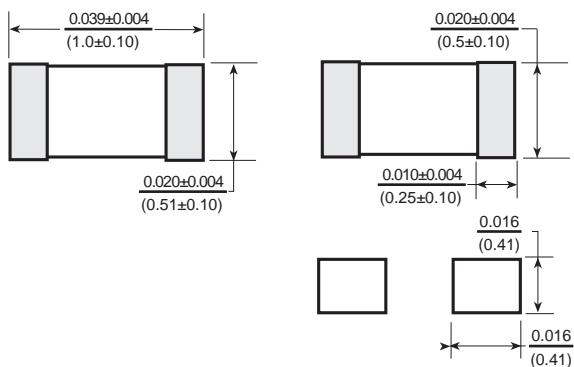


# HFC03 High Frequency Chip Inductors



Dimensions:  $\frac{\text{Inches}}{\text{(mm)}}$



## Features

- 0402 EIA size for high board density applications.
- Excellent Q and SRF characteristics for high frequency applications.
- Cost effective monolithic construction

## Electrical

**Inductance range:** .2nh to 220nh

**Tolerance:** use S for  $\pm .3\text{nh}$ , J for 5%, K for 10%

**Test Frequency:** Inductance and Q tested at 100MHz, 200mv with HP4291A Impedance Analyzer  
Inductance vs Freq. Characteristics measured on HP4291A  
Q vs Frequency Characteristics measured on HP4291A  
SRF measured on HPE4991 & HP87530  
DCR measured on Chen Hwa CH502BC or HP4338B

## Mechanical

**Operating Temperature:** -55°C-125°C

**Storage Temperature:** Under 25°C, Humidity 40% - 65%

**Solderability:** 90% terminal coverage

**Test Condition:** Pre heat:150°C. 1min. Solder composition:

Sn/Ag3.0/Cu.0.5 (Pb free)

Solder temp: 245°C $\pm$ 5°C (pb Free)

Immersion time: 4  $\pm$  1 sec.

**Resistance to solder heat:**

No damage to part

**Test Condition**

Pre heat: 150°C. 1min.

Solder composition:

Sn/Ag3.0/Cu.0.5 (Pb free)

Solder temp: 260°C $\pm$ 5°C (pb Free)

Immersion time: 10  $\pm$  1 sec.

## Physical

**Packaging:** 10000 pieces per 7 inch reel.

Allied Part Number	Inductance (nh) @100MHz	Tolerance (%)	Q Typical @100MHz	Q Typical @800MHz	SRF Typical (MHz)	DCR Max. ( $\Omega$ )	IDC Max. (mA)
HFC03-0N2S-RC	0.2	0.3nH	9	28	10000	0.10	400
HFC03-0N5S-RC	0.5	0.3nH	9	28	10000	0.10	400
HFC03-0N7S-RC	0.7	0.3nH	9	28	10000	0.10	400
HFC03-1N0S-RC	1.0	0.3nH	9	28	10000	0.10	400
HFC03-1N2S-RC	1.2	0.3nH	9	28	10000	0.10	400
HFC03-1N5S-RC	1.5	0.3nH	10	28	9000	0.10	400
HFC03-1N8S-RC	1.8	0.3nH	10	28	8700	0.10	400
HFC03-2N2S-RC	2.2	0.3nH	10	29	8100	0.15	400
HFC03-2N7S-RC	2.7	0.3nH	11	30	7700	0.15	400
HFC03-3N3J-RC	3.3	5	11	30	6300	0.15	400
HFC03-3N6J-RC	3.6	5	11	30	6100	0.15	400
HFC03-3N9J-RC	3.9	5	11	31	6100	0.20	400
HFC03-4N3J-RC	4.3	5	11	31	5400	0.20	400
HFC03-4N7J-RC	4.7	5	11	31	5400	0.20	400
HFC03-5N1J-RC	5.1	5	11	31	5100	0.20	400
HFC03-5N6J-RC	5.6	5	11	31	5100	0.20	400
HFC03-6N2J-RC	6.2	5	11	31	4550	0.25	400
HFC03-6N8J-RC	6.8	5	11	33	4550	0.25	400
HFC03-7N5J-RC	7.5	5	11	32	4300	0.25	400
HFC03-8N2J-RC	8.2	5	12	32	4100	0.30	300
HFC03-10NJ-RC	10	5	12	32	3900	0.35	300
HFC03-12NJ-RC	12	5	12	31	3000	0.40	300
HFC03-15NJ-RC	15	5	12	30	2600	0.50	300
HFC03-18NJ-RC	18	5	12	29	2350	0.55	300
HFC03-22NJ-RC	22	5	12	28	2000	0.70	300
HFC03-27NJ-RC	27	5	12	27	1900	0.80	300
HFC03-33NJ-RC	33	5	10	25	1700	1.00	200
HFC03-39NJ-RC	39	5	10	25	1600	1.20	150
HFC03-47NJ-RC	47	5	9	22	1300	1.30	150
HFC03-56NJ-RC	56	5	10	21	1250	1.50	150
HFC03-68NJ-RC	68	5	10	15	1000	1.70	100
HFC03-82NJ-RC	82	5	9	13	900	1.80	100
HFC03-100NJ-RC	100	5	9	3	850	2.00	100

Additional Inductance values available upon request.  
All specifications subject to change without notice.