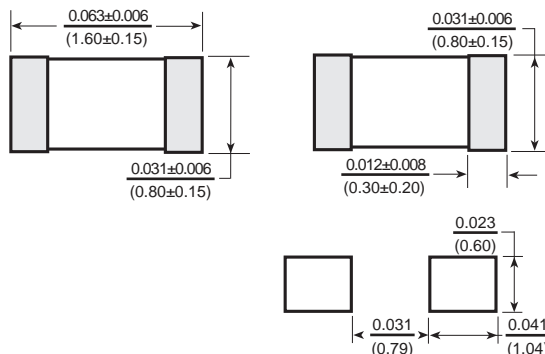




# High Frequency Chip Inductors HFC05

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



Allied Part Number	Inductance (nh) @100MHz	Tolerance (%)	Q Typical @100MHz	Q Typical @800MHz	SRF Typical (MHz)	DCR Max. (Ω)	IDC Max. (mA)
HFC05-1N0S-RC	1.0	0.3nh	12	50	10000	0.10	600
HFC05-1N2S-RC	1.2	0.3nh	13	65	10000	0.10	600
HFC05-1N5S-RC	1.5	0.3nh	13	47	8000	0.10	600
HFC05-1N6S-RC	1.6	0.3nh	13	47	8000	0.10	600
HFC05-1N7S-RC	1.7	0.3nh	13	47	8000	0.10	600
HFC05-1N8S-RC	1.8	0.3nh	13	51	8000	0.10	600
HFC05-2N2S-RC	2.2	0.3nh	13	46	7200	0.10	600
HFC05-2N5S-RC	2.5	0.3nh	13	46	6200	0.10	600
HFC05-2N7S-RC	2.7	0.3nh	13	45	6200	0.10	600
HFC05-3N3K-RC	3.3	10	13	51	5200	0.12	600
HFC05-3N9K-RC	3.9	10	13	52	5000	0.14	600
HFC05-4N3K-RC	4.3	10	13	52	4750	0.16	600
HFC05-4N7K-RC	4.7	10	13	41	4750	0.16	600
HFC05-5N1K-RC	5.1	10	13	52	4100	0.18	600
HFC05-5N4K-RC	5.4	10	13	41	4100	0.18	600
HFC05-5N6K-RC	5.6	10	13	41	4100	0.18	600
HFC05-6N2K-RC	6.2	10	13	44	3750	0.22	600
HFC05-6N8K-RC	6.8	10	13	44	3750	0.22	600
HFC05-7N5K-RC	7.5	10	13	44	3300	0.24	600
HFC05-8N2K-RC	8.2	10	13	44	3300	0.24	600
HFC05-10NK-RC	10	10	13	45	3000	0.26	600
HFC05-11N5K-RC	11.5	10	13	45	2800	0.30	1000
HFC05-12NK-RC	12	10	15	46	2600	0.28	600
HFC05-15NK-RC	15	10	15	48	2500	0.32	600
HFC05-18NK-RC	18	10	15	48	2400	0.35	600
HFC05-22NK-RC	22	10	17	45	2000	0.40	500
HFC05-27NK-RC	27	10	17	43	1900	0.45	500
HFC05-33NK-RC	33	10	18	39	1600	0.55	400
HFC05-39NK-RC	39	10	18	***37	1400	0.60	400
HFC05-47NK-RC	47	10	18	***35	1300	0.70	400
HFC05-56NK-RC	56	10	18	***32	1100	0.75	400
HFC05-62NK-RC	62	10	18	***34	1050	0.85	400
HFC05-68NK-RC	68	10	18	***34	1050	0.85	400
HFC05-75NK-RC	75	10	18	***32	900	1.00	300
HFC05-82NK-RC	82	10	18	***32	900	1.00	300
HFC05-100NK-RC	100	10	18	***20	770	1.20	300
HFC05-120NK-RC	*120	10	*14	**23	650	2.30	300
HFC05-150NK-RC	*150	10	*15	**23	550	2.40	250
HFC05-180NK-RC	*180	10	*15	**21	520	2.70	250
HFC05-220NK-RC	*220	10	*15	**20	500	2.80	250
HFC05-270NK-RC	***270	10	*13	**14	470	3.50	150

\*at 50MHz. \*\*at 300MHz. \*\*\*at 500MHz.  
Additional Inductance values available upon request.  
All specifications subject to change without notice.

## Features

- 0603 EIA size for high board density applications.
- Excellent Q and SRF characteristics for high frequency applications.
- Cost effective monolithic construction

## Electrical

**Inductance range:** 1.0nh to 270nh

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

**Test Frequency:** Inductance and Q tested at 100MHz, 200mv with HP4191A Impedance Analyzer + HP16197A Inductance vs Freq. Characteristics measured on HP4191A Q vs Frequency Characteristics measured on HP4191A SRF measured with HP4291A & HP16197A

DCR measured with Chen Hwa CH502BC or HP4338B  
IDC measured with HP4291-A + HP6632A

## 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:** 4000 pieces per 7 inch reel.