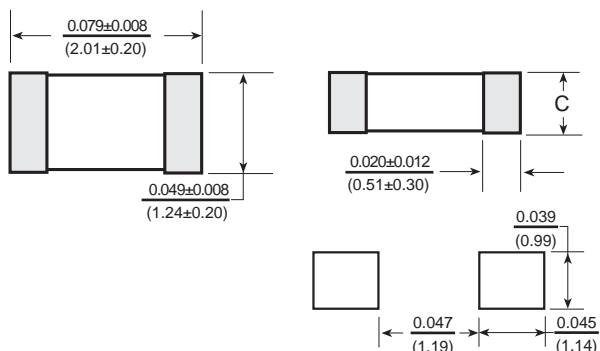


# HFC10 High Frequency Chip Inductors



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

$$C = \frac{0.035 \pm 0.008}{(0.90 \pm 0.2)}$$

$$*C = \frac{0.047 \pm 0.008}{(1.2 \pm 0.2)}$$



## Features

- 0805 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 470nh applications

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

**Inductance & Q:** Measured at 100MHz HP4291A & HP16197A

**Inductance vs Frequency**

**Characteristics:** Measured on HP4192A

**Q vs Frequency Characteristics:**

Measured on HP4192A

**SRF:** Measured on HP4291A & HP16197A or HP8753C

**IDC:** Measured on HP4291 with 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:** 1.5nh - 150nh, 4000 pieces per reel.  
180nh - 470nh, 3000 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)
HFC10-1N0S-RC	1.0	0.3nh	13	40	>6000	0.10	300
HFC10-1N2S-RC	1.2	0.3nh	13	40	>6000	0.10	300
HFC10-1N5S-RC	1.5	0.3nh	13	40	>6000	0.10	300
HFC10-1N8S-RC	1.8	0.3nh	13	45	>6000	0.10	300
HFC10-2N2S-RC	2.2	0.3nh	13	48	>6000	0.10	300
HFC10-2N7S-RC	2.7	0.3nh	13	40	>6000	0.10	300
HFC10-3N3K-RC	3.3	10	15	56	>6000	0.13	300
HFC10-3N9K-RC	3.9	10	15	54	5400	0.15	300
HFC10-4N7K-RC	4.7	10	15	50	4500	0.20	300
HFC10-5N6K-RC	5.6	10	15	53	4000	0.23	300
HFC10-6N8K-RC	6.8	10	15	51	3650	0.25	300
HFC10-8N2K-RC	8.2	10	15	53	3000	0.28	300
HFC10-10NK-RC	10	10	16	45	2500	0.30	300
HFC10-12NK-RC	12	10	16	48	2450	0.35	300
HFC10-15NK-RC	15	10	17	48	2000	0.40	300
HFC10-18NK-RC	18	10	17	43	1750	0.45	300
HFC10-22NK-RC	22	10	17	47	1700	0.50	300
HFC10-27NK-RC	27	10	18	38	1550	0.55	300
HFC10-33NK-RC	33	10	19	35	1350	0.60	300
HFC10-39NK-RC	39	10	21	40	1300	0.65	300
HFC10-47NK-RC	47	10	21	38	1200	0.70	300
HFC10-56NK-RC	56	10	21	31	1150	0.75	300
HFC10-68NK-RC	68	10	21	28	1000	0.80	300
HFC10-82NK-RC	82	10	22	16	850	0.90	300
HFC10-100NK-RC	100	10	23		730	1.00	300
HFC10-120NK-RC	120	10	22		650	1.20	300
HFC10-150NK-RC	150	10	22		550	1.40	300
HFC10-180NK-RC	*180	10	23		500	1.80	300
HFC10-220NK-RC	*220	10	20		450	2.00	300
HFC10-270NK-RC	*270	10	20		400	2.50	200
HFC10-330NK-RC	*330	10	22		380	3.00	200
HFC10-390NK-RC	*390	10	17		330	3.50	200
HFC10-470NK-RC	*470	10	17		300	4.00	200

\*at 50MHz.

Available in tighter tolerances.

All specifications subject to change without notice.