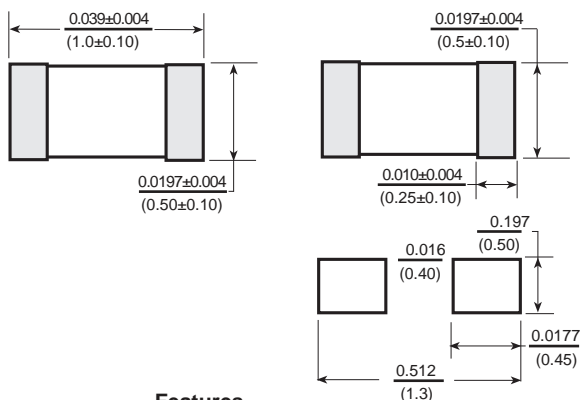


# HFC03SM High Frequency Chip Inductors



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



## Features

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

## Electrical

**Inductance range:** 1.5nh to 15nh

**Tolerance:** Available in: J=5%, S= $\pm$ 0.3nH, C= $\pm$ 0.2nH

**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:** -55°C ~125°C (after PCB) Humidity 40% - 70% (before)

**Solderability:** 95% 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: 1=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,200mV	Tolerance (%)	Q Min	SRF (MHz)Min	DCR Max. (Ω)	IDC Max. (mA)
HFC03SM-1N5J-RC	1.5	5	8	6000	0.10	400
HFC03SM-1N6J-RC	1.6	5	8	6000	0.10	400
HFC03SM-1N8J-RC	1.8	5	8	6000	0.10	400
HFC03SM-2N0J-RC	2.0	5	8	6000	0.12	400
HFC03SM-2N2J-RC	2.2	5	8	6000	0.15	400
HFC03SM-2N4J-RC	2.4	5	8	6000	0.15	400
HFC03SM-2N7J-RC	2.7	5	8	6000	0.15	400
HFC03SM-3N0J-RC	3.0	5	8	6000	0.15	400
HFC03SM-3N3J-RC	3.3	5	8	6000	0.15	400
HFC03SM-3N6J-RC	3.6	5	8	6000	0.15	400
HFC03SM-3N9J-RC	3.9	5	8	6000	0.19	400
HFC03SM-4N3J-RC	4.3	5	8	6000	0.20	400
HFC03SM-4N7J-RC	4.7	5	8	6000	0.20	400
HFC03SM-5N1J-RC	5.1	5	8	6000	0.20	400
HFC03SM-5N6J-RC	5.6	5	8	5300	0.20	400
HFC03SM-6N2J-RC	6.2	5	8	4300	0.25	400
HFC03SM-6N8J-RC	6.8	5	8	4200	0.25	400
HFC03SM-7N5J-RC	7.5	5	8	3900	0.25	400
HFC03SM-8N2J-RC	8.2	5	8	3600	0.30	300
HFC03SM-9N1J-RC	9.1	5	8	3400	0.34	300
HFC03SM-10NJ-RC	10	5	8	3200	0.35	300
HFC03SM-12NJ-RC	12	5	8	2800	0.35	300
HFC03SM-15NS-RC	15	5	8	2300	0.46	300

Additional Inductance values available upon request.

All specifications subject to change without notice