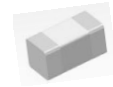


## Multilayer RF Inductors --- HFM0603 Series

### Features

- Compact design.
- High self-resonant frequency
- High reliability.
- RoHS compliant.
- Operating temperature range  $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$  (Including self - temperature rise).



### Applications

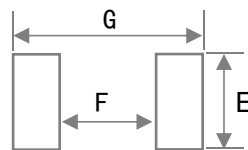
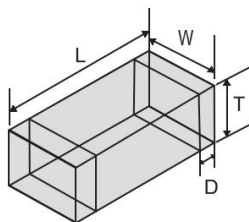
- Communications, Computer, Remote control, etc.
- Mobile phones .
- Filters
- Navigation systems, Bluetooth, WLAN

### Production identification

HFM      0603      -      2N2      J  
 ①            ②            ③            ④

- ① Series name
- ② Size:  $0.6\text{mm} \times 0.3\text{mm} \times 0.3\text{mm}$
- ③ Inductance:  $2.2\text{nH}$
- ④ Tolerance:  $G = \pm 2\%$ ,  $H = \pm 3\%$ ,  $J = \pm 5\%$ ,  $K = \pm 10\%$ ,  
 $B = \pm 0.1\text{nH}$ ,  $C = \pm 0.2\text{nH}$ ,  $S = \pm 0.3\text{nH}$ ,  $D = \pm 0.5\text{nH}$

### Series Shape and Dimensions (Unit: mm)



Series	L(mm)	W(mm)	T(mm)	D(mm)	E(mm)	F(mm)	G(mm)	SPQ (PCS)
HFM0603	$0.6 \pm 0.03$	$0.3 \pm 0.03$	$0.3 \pm 0.03$	$0.15 \pm 0.05$	0.3 Typ.	0.3 Typ	0.8 Typ.	15000

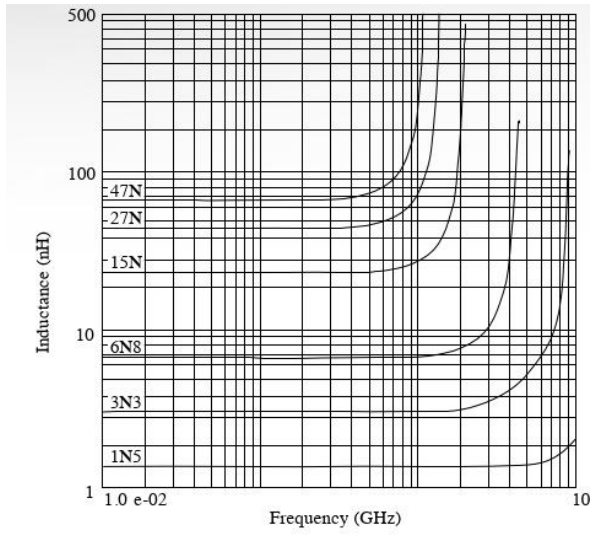
## Multilayer RF Inductors---HFM0603- Series



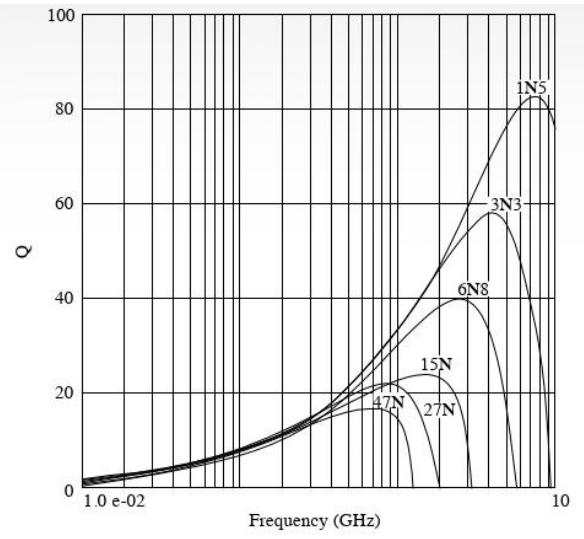
### HFM0603 Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (%)	Q Value (Min)	Test Freq. L/Q (MHz)	SRF Min. (GHz)	DCR Max(Ω)	Rated Current Max (mA)
HFM0603-1N0_	1.0	±0.3nH	4	100	>10	0.11	470
HFM0603-1N2_	1.2	±0.3nH	4	100	>10	0.12	450
HFM0603-1N5_	1.5	±0.3nH	4	100	>10	0.13	430
HFM0603-1N8_	1.8	±0.3nH	4	100	>10	0.16	390
HFM0603-2N0_	2.0	±0.3nH	4	100	>10	0.17	380
HFM0603-2N2_	2.2	±0.3nH	4	100	8.8	0.19	360
HFM0603-2N4_	2.4	±0.3nH	4	100	8.3	0.20	350
HFM0603-2N7_	2.7	±0.3nH	4	100	7.7	0.21	340
HFM0603-3N0_	3.0	±0.3nH	4	100	7.2	0.22	330
HFM0603-3N3_	3.3	±0.3nH	4	100	6.7	0.23	320
HFM0603-3N6_	3.6	±0.3nH	4	100	6.4	0.25	310
HFM0603-3N9_	3.9	±0.3nH	4	100	6.0	0.27	300
HFM0603-4N3_	4.3	±0.3nH	4	100	5.7	0.30	280
HFM0603-4N7_	4.7	±0.3nH	4	100	5.3	0.30	280
HFM0603-5N1_	5.1	±0.3nH	4	100	5.0	0.33	270
HFM0603-5N6_	5.6	±0.3nH	4	100	4.6	0.36	260
HFM0603-6N2_	6.2	±0.3nH	4	100	4.2	0.38	250
HFM0603-6N8_	6.8	5	4	100	3.9	0.39	250
HFM0603-7N5_	7.5	5	4	100	3.6	0.41	240
HFM0603-8N2_	8.2	5	4	100	3.4	0.45	230
HFM0603-9N1_	9.1	5	4	100	3.2	0.48	220
HFM0603-10N_	10	5	4	100	2.9	0.51	220
HFM0603-12N_	12	5	4	100	2.7	0.68	190
HFM0603-15N_	15	5	4	100	2.3	0.71	180
HFM0603-18N_	18	5	4	100	2.1	0.81	170
HFM0603-22N_	22	5	4	100	1.8	1.00	150
HFM0603-27N_	27	5	4	100	1.8	1.35	120
HFM0603-33N_	33	5	4	100	1.7	1.47	110
HFM0603-39N_	39	5	4	100	1.5	1.72	100
HFM0603-47N_	47	5	4	100	1.3	1.90	100
HFM0603-56N_	56	5	4	100	1.1	2.27	80
HFM0603-68N_	68	5	4	100	1.1	2.66	80
HFM0603-82N_	82	5	4	100	1.0	3.37	70

## Typical Electrical Graphs



Q vs. Frequency



Inductance vs. Frequency