

HI 0603 Series [Preliminary]

High Frequency Multilayer Chip Inductors

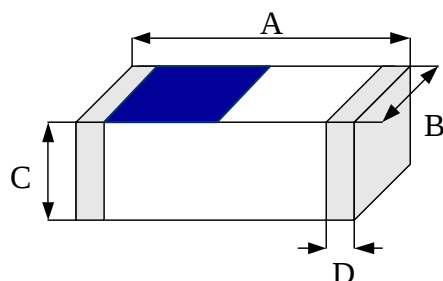
Features

- ❖ Super fine and monolithic structure ensuring high performance and reliability.
- ❖ High frequency applications up to 6GHz.

Applications

- ❖ RF modules for telecommunication systems including GSM, PCS, DECT, WLAN, Bluetooth, etc.

Shape and Dimensions (Polarity drawing to be revised)



Unit : mm (inch)

TYPE	EIA Code	A	B	C	D
0603	0201	0.60 ±0.03	0.30 ±0.03	0.30 ±0.03	0.15 ±0.05
		(.024 ±.001)	(.012 ±.001)	(.012 ±.001)	(.006 ±.002)

Part Number

HI 0603 - 1 B 2N2 □ H □
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Type	HI : High Frequency Inductors	② Dimensions (L × W)	0.6 × 0.3 mm
③ Circuit	1 : Single	④ Material Code	B (RoHS compliant)
⑤ Inductance	2N2=2.2nH 22N=22nH	⑥ Tolerance	S:±0.3nH, J:±5%, K:±10%
⑦ Marking	H: With Polarity Marking	⑧ Packaging	T: Tape & Reel B: Bulk

Advanced Ceramic X Corp.

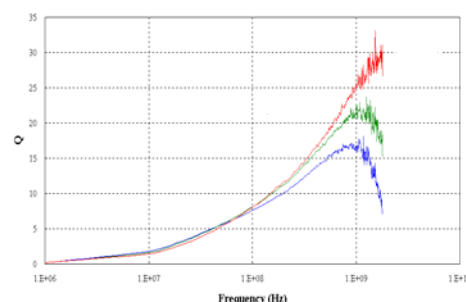
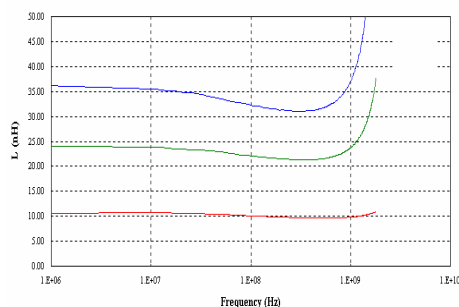
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Typical Electrical Characteristics



Specifications

Part Number	Inductance (nH)	Q Min.	Q Typ.	L/Q Freq. (MHz)	R _{DC} (Ω)		S.R.F. (MHz) Typ.	I _{DC} (mA) Max.
					Max	Typ.		
HI0603-1B1N0_H_	1.0 ± 0.3	4	6	100	0.12	0.07	17100	300
HI0603-1B1N2_H_	1.2 ± 0.3	4	6	100	0.15	0.11	15300	300
HI0603-1B1N5_H_	1.5 ± 0.3	4	6	100	0.18	0.11	13000	300
HI0603-1B1N8_H_	1.8 ± 0.3	4	6	100	0.22	0.12	11400	300
HI0603-1B2N2_H_	2.2 ± 0.3	4	6	100	0.26	0.16	10100	300
HI0603-1B2N7_H_	2.7 ± 0.3	4	6	100	0.32	0.17	8900	300
HI0603-1B3N3_H_	3.3 ± 0.3 or ± 10%	4	6	100	0.38	0.21	7700	300
HI0603-1B3N9_H_	3.9 ± 0.3 or ± 10%	4	6	100	0.45	0.31	6700	300
HI0603-1B4N7_H_	4.7 ± 0.3 or ± 10%	4	6	100	0.50	0.35	5900	300
HI0603-1B5N6_H_	5.6 ± 0.3 or ± 10%	5	7	100	0.60	0.40	5600	300
HI0603-1B6N8_H_	6.8 ± 5% or ± 10%	5	7	100	0.70	0.42	5100	250
HI0603-1B8N2_H_	8.2 ± 5% or ± 10%	5	7	100	0.90	0.44	4700	250
HI0603-1B10N_H_	10 ± 5% or ± 10%	5	7	100	1.20	0.45	4100	250
HI0603-1B12N_H_	12 ± 5% or ± 10%	5	7	100	1.30	0.55	3500	250
HI0603-1B15N_H_	15 ± 5% or ± 10%	5	7	100	1.40	0.64	2900	250
HI0603-1B18N_H_	18 ± 5% or ± 10%	5	7	100	1.50	0.78	2600	200
HI0603-1B22N_H_	22 ± 5% or ± 10%	5	8	100	1.80	0.97	2500	200
HI0603-1B27N_H_	27 ± 5% or ± 10%	5	8	100	2.00	1.13	2100	200
HI0603-1B33N_H_	33 ± 5% or ± 10%	5	8	100	2.30	2.07	2100	200
HI0603-1B39N_H_	39 ± 5% or ± 10%	5	8	100	2.50	2.39	1600	200

Operating Temperature Range : -40 ~ +100 °C

Storage Temperature Range : +5 ~ +35 °C, Humidity 45~75%RH

Storage Period: 12 months max.

Test Method : L and Q : HP 4291B (+16192A)
S.R.F. (Self Resonant Frequency) : HP 8722D
R_{DC} (DC Resistance) : HP 4338B
I_{DC}