

HI 1608 Series

High Frequency Multilayer Chip Inductors

Features

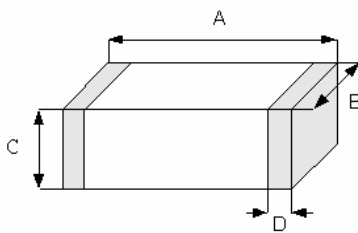
- ❖ Monolithic structure ensuring high performance and reliability.
- ❖ High frequency applications up to 6GHz.

Applications

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



Shape and Dimensions



Unit : mm (inch)

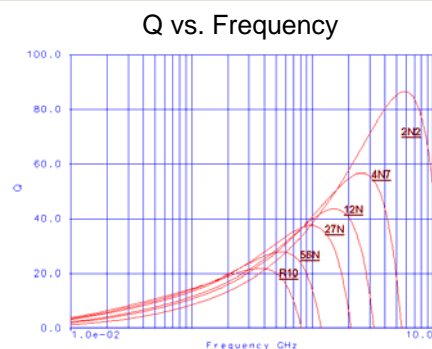
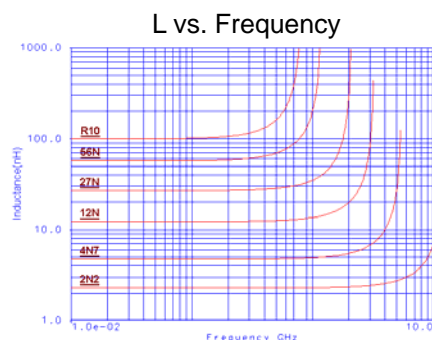
TYPE	EIA Code	A	B	C	D
1608	0603	1.60 ±0.15	0.80 ±0.15	0.80 ±0.15	0.30 ±0.20
		(.063 ±.006)	(.031 ±.006)	(.031 ±.006)	(.012 ±.008)

Part Number

HI **1608** - **1** **B** **4N7** **□** **□** **□**
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Type	HI :High Frequency Inductors	② Dimensions (L x W)	1.6 x 0.8 mm
③ Circuit	1 : Single	④ Material Code	B (lead-containing) C (lead-free)
⑤ Inductance	4N7=4.7nH 47N=47nH R10=100nH	⑥ Tolerance	S:±0.3nH, J:±5%, K:±10%
⑦ Marking	M: With marking N: No marking	⑧ Packaging	T: Tape & Reel B: Bulk

Typical Electrical Characteristics



Specifications

Part Number	Inductance (nH)	Q Min.	L/Q Freq. (MHz)	R _{DC} () Max.	S.R.F. (MHz) Typ.	I _{DC} (mA) Max.	Q'ty/ Reel (pcs)
HI1608-1_1N0_N_	1.0 ± 0.3	8	100	0.10	>17000	600	4,000
HI1608-1_1N2_N_	1.2 ± 0.3	8	100	0.10	>17000		
HI1608-1_1N5_N_	1.5 ± 0.3	8	100	0.10	>17000		
HI1608-1_1N8_N_	1.8 ± 0.3	8	100	0.15	13000		
HI1608-1_2N2_N_	2.2 ± 0.3	8	100	0.15	12000		
HI1608-1_2N7_N_	2.7 ± 0.3	8	100	0.20	8600		
HI1608-1_3N3_N_	3.3 ± 0.3 or ± 10%	8	100	0.25	6500		
HI1608-1_3N9_N_	3.9 ± 0.3 or ± 10%	8	100	0.25	6300		
HI1608-1_4N7_N_	4.7 ± 0.3 or ± 10%	8	100	0.30	5400		
HI1608-1_5N6_N_	5.6 ± 0.3 or ± 10%	8	100	0.30	4600		
HI1608-1_6N8_N_	6.8 ± 5% or ± 10%	8	100	0.35	4500		
HI1608-1_8N2_N_	8.2 ± 5% or ± 10%	8	100	0.40	3800		
HI1608-1_10N_N_	10 ± 5% or ± 10%	8	100	0.45	3700		
HI1608-1_12N_N_	12 ± 5% or ± 10%	8	100	0.50	3200		
HI1608-1_15N_N_	15 ± 5% or ± 10%	8	100	0.55	2900		
HI1608-1_18N_N_	18 ± 5% or ± 10%	10	100	0.60	2100		
HI1608-1_22N_N_	22 ± 5% or ± 10%	10	100	0.65	2100		
HI1608-1_27N_N_	27 ± 5% or ± 10%	10	100	0.70	2000		
HI1608-1_33N_N_	33 ± 5% or ± 10%	10	100	0.80	1600		
HI1608-1_39N_N_	39 ± 5% or ± 10%	10	100	0.85	1500		
HI1608-1_47N_N_	47 ± 5% or ± 10%	12	100	1.00	1200		
HI1608-1_56N_N_	56 ± 5% or ± 10%	12	100	1.10	1100		
HI1608-1_68N_N_	68 ± 5% or ± 10%	12	100	1.20	1000		
HI1608-1_82N_N_	82 ± 5% or ± 10%	12	100	1.80	850		
HI1608-1_R10_N_	100 ± 5% or ± 10%	12	100	2.00	750		
HI1608-1_R12_N_	120 ± 5% or ± 10%	8	50	2.30	700		
HI1608-1_R15_N_	150 ± 5% or ± 10%	8	50	2.40	650		
HI1608-1_R18_N_	180 ± 5% or ± 10%	8	50	2.70	550		
HI1608-1_R22_N_	220 ± 5% or ± 10%	8	50	2.80	450		

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

S.R.F. (Self Resonant Frequency)

R_{DC} (DC Resistance)

I_{DC} (Rated Current)

: HP 4291B (+16193A)

: HP 8722D

: HP 4338B

: HP 4284A

Notes

- ❖ The contents of this data sheet are subject to change without notice. Please confirm the specifications and delivery conditions when placing your order.

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