

# On-Board Type Coils / Chip Inductors

For High Frequency Use Monolithic Type HCl Series

## HCl Series

**Small Size Multilayer Chip Inductor for High Frequency High Q, Stable Inductance in High Freq. Range.**

小尺寸且適用於高頻、高Q 值及在高頻帶有穩定感值應用的積層晶片電感。



### Features

1. Monolithic inorganic material construction.
2. Closed magnetic circuit avoids crosstalk.
3. S.M.T. type.
4. Suitable for flow and reflow soldering.
5. Shapes and dimensions follow E.I.A. spec.
6. Available in various sizes.
7. Excellent solderability and heat resistance.
8. High SRF up to 6GHz and above.
9. The products contain no lead and also support lead-free soldering.

### Applications

Wireless communications, cellular phone, cordless phone, pager, etc..

Miscellaneous high-frequency circuits. EMI countermeasure in high-frequency circuits.

### Lead Free Part Numbering

**HCl** **1608** **F** - **10N** **J**  
 A B C D E

- A : Series  
 B : Dimension A x B  
 C : Lead Free Code  
 D : Inductance 10N=10nH  
 E : Inductance Tolerance S=±0.3nH, J=±5%, K=±10%

### 特徵

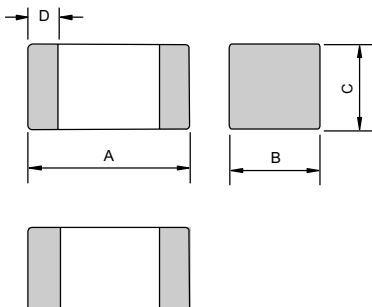
1. 單石無機材料結構。
2. 封閉磁路避免干擾。
3. 表面黏著型式。
4. 適合一般焊接及迴焊。
5. 形狀與尺寸符合E.I.A.標準。
6. 多種尺寸可供選擇。
7. 絕佳之焊錫性與耐熱性。
8. 至少6GHz 的自我共振頻率。
9. 產品無鉛適合無鉛鉛錫。

### 應用

無線通訊、行動電話、無線電話、傳呼機.....等等。

各式各樣的高頻電路、高頻電路的EMI對策。

### Dimensions



Chip size				
Size	A(mm)	B(mm)	C(mm)	D(mm)
1005	1.0±0.1	0.5±0.1	0.5±0.1	0.25±0.1
1608	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2
2012	2.0±0.2	1.25±0.2	0.85±0.2	0.5±0.3
			1.25±0.2	

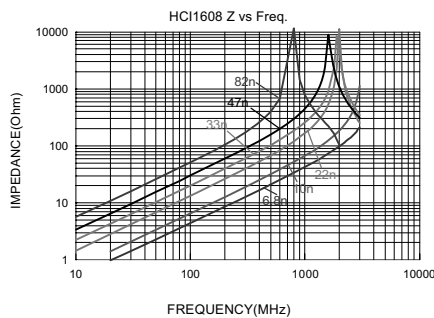
● All the data listed in this catalogue are for reference only,TAI-TECH reserves the right to alter or revise the specifications without prior notification.

■ HCl 1608 Series

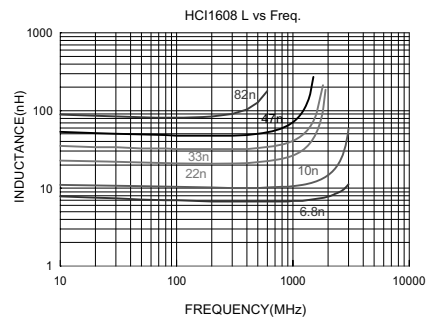
Part Number	Thickness C Size (mm)	Inductance		Q @ 100MHz		Rated Current (mA) max.	DCR ( $\Omega$ ) max.	SRF(MHz)	
		(nH)	Test Frequency (MHz)	Nominal Value	min.			typ.	min.
HCl1608-1N0S	0.80±0.15	1.0	100	14	8	300	0.05	>13000	10000
HCl1608-1N2S	0.80±0.15	1.2	100	14	8	300	0.05	>13000	10000
HCl1608-1N5S	0.80±0.15	1.5	100	14	8	300	0.10	>13000	6000
HCl1608-1N8S	0.80±0.15	1.8	100	10	8	300	0.10	>13000	6000
HCl1608-2N2S	0.80±0.15	2.2	100	12	8	300	0.10	12000	6000
HCl1608-2N7S	0.80±0.15	2.7	100	13	10	300	0.10	11000	6000
HCl1608-3N3□	0.80±0.15	3.3	100	14	10	300	0.12	9000	6000
HCl1608-3N9□	0.80±0.15	3.9	100	13	10	300	0.14	8000	6000
HCl1608-4N7□	0.80±0.15	4.7	100	13	10	300	0.16	6500	4000
HCl1608-5N6□	0.80±0.15	5.6	100	14	10	300	0.18	5800	4000
HCl1608-6N8□	0.80±0.15	6.8	100	14	10	300	0.22	5600	4000
HCl1608-8N2□	0.80±0.15	8.2	100	14	10	300	0.24	5200	3500
HCl1608-10N□	0.80±0.15	10	100	14	12	300	0.26	4600	3400
HCl1608-12N□	0.80±0.15	12	100	14	12	300	0.28	4000	2600
HCl1608-15N□	0.80±0.15	15	100	15	12	300	0.32	3400	2300
HCl1608-18N□	0.80±0.15	18	100	15	12	300	0.35	3000	2000
HCl1608-22N□	0.80±0.15	22	100	16	12	300	0.40	2900	1600
HCl1608-27N□	0.80±0.15	27	100	16	12	300	0.45	2200	1400
HCl1608-33N□	0.80±0.15	33	100	17	12	300	0.55	1800	1200
HCl1608-39N□	0.80±0.15	39	100	18	12	300	0.60	1600	1100
HCl1608-47N□	0.80±0.15	47	100	17	12	300	0.70	1600	900
HCl1608-56N□	0.80±0.15	56	100	17	12	300	0.75	1400	900
HCl1608-68N□	0.80±0.15	68	100	18	12	300	0.85	1200	700
HCl1608-82N□	0.80±0.15	82	100	18	12	300	0.95	1100	600
HCl1608-R10□	0.80±0.15	100	100	18	12	300	1.00	1000	600
HCl1608-R12□	0.80±0.15	120	50	16	8	300	1.20	800	500
HCl1608-R15□	0.80±0.15	150	50	13	8	300	1.20	800	500
HCl1608-R18□	0.80±0.15	180	50	13	8	300	1.30	700	400
HCl1608-R22□	0.80±0.15	220	50	12	8	300	1.50	600	400
HCl1608-R27□	0.80±0.15	270	50	14	8	150	1.90	550	300

NOTE: □ :TOLERANCE S:+/-0.3nH J:+/-5% K:+/-10%

■ Impedance v.s. Frequency Characteristics



■ Inductance v.s. Frequency Characteristics



■ Q v.s. Frequency Characteristics

