

Features

- ◆ Monolithic structure for high reliability
- ◆ High self-resonant frequency
- ◆ Excellent solderability and high heat resistance
- ◆ High Q value correspond to wire wound inductor

Applications

- ◆ RF circuit in telecommunication and other equipments
- ◆ Mobile phones such as GSM, CDMA, PDC,etc.
- ◆ Bluetooth, W-LAN

Description Of Part Name

HRCL : **C** **Q** **1005** **T** **3N9** **S** **F** **XX**
 A B C D E F G H I

A

Type	
HRCL	Chip Inductor

B

Material Code	
C	

C

Feature Code	
Q	For High Q

D

External Dimensions (L×W) (mm)	
1005 [0402]	1.0×0.5

E

Packing	
T	Tape & Reel

F

Nominal Inductance	
Example	Nominal Value
3N9	3.9nH
10N	10nH
※N=nH	

G

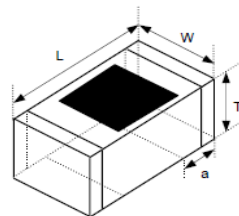
Inductance Tolerance	
B	±0.1nH
C	±0.2nH
S	±0.3nH
G	±2%
H	±3%
J	±5%

H

Hazardous Substance Free Products	
F	

I

Internal Code	
XX	



SHAPE AND DIMENSIONS

Type	L	W	T	a
HRCL-CQ1005	1.0±0.15	0.5±0.15	0.5±0.15	0.25±0.1
[0402]	[0.039±0.006]	[0.024±0.006]	[0.020±0.006]	.010±0.00

Unit: mm [inch]

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<http://www.ftind.com>



SPECIFICATIONS

HMCQ1005 TYPE

Part Number	Inductance	Min. Quality Factor	L, Q Test Freq. L/Q	Typical Q @ Freq. (GHz)				Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current	Thickness
				100	250	900	1800				
Units	nH	-	MHz	-				MHz	Ω	mA	mm [inch]
Symbol	L	Q	Freq.	Q				S.R.F	DCR	Ir	T
HRCL-CQ1005T1N0□F	1.0	20	250	13	22	48	75	6000	0.05	1000	0.5±0.15 [.020±.006]
HRCL-CQ1005T1N2□F	1.2	20	250	13	22	48	75	6000	0.05	1000	
HRCL-CQ1005T1N5□F	1.5	20	250	13	22	58	76	6000	0.05	1000	
HRCL-CQ1005T1N8□F	1.8	20	250	13	22	49	78	6000	0.07	800	
HRCL-CQ1005T2N0□F	2.0	20	250	14	23	49	82	6000	0.07	800	
HRCL-CQ1005T2N2□F	2.2	20	250	14	23	49	82	6000	0.07	800	
HRCL-CQ1005T2N4□F	2.4	20	250	14	23	47	78	6000	0.07	800	
HRCL-CQ1005T2N5□F	2.5	20	250	14	23	47	78	6000	0.07	800	
HRCL-CQ1005T2N7□F	2.7	20	250	14	23	48	82	6000	0.09	700	
HRCL-CQ1005T2N9□F	2.9	20	250	14	23	48	82	6000	0.09	700	
HRCL-CQ1005T3N0□F	3.0	20	250	14	23	50	84	6000	0.09	700	
HRCL-CQ1005T3N3□F	3.3	20	250	14	24	52	90	6000	0.09	700	
HRCL-CQ1005T3N6□F	3.6	20	250	15	24	55	95	6000	0.10	700	
HRCL-CQ1005T3N9□F	3.9	20	250	15	25	50	89	6000	0.10	700	
HRCL-CQ1005T4N1□F	4.1	20	250	15	25	49	86	6000	0.12	650	
HRCL-CQ1005T4N3□F	4.3	20	250	15	25	49	86	6000	0.13	600	
HRCL-CQ1005T4N7□F	4.7	20	250	15	26	50	88	6000	0.13	600	
HRCL-CQ1005T5N1□F	5.1	20	250	15	26	49	84	5500	0.13	600	
HRCL-CQ1005T5N6□F	5.6	20	250	15	27	50	84	5500	0.13	600	
HRCL-CQ1005T5N8□F	5.8	20	250	15	27	50	82	5500	0.13	600	
HRCL-CQ1005T6N2□F	6.2	20	250	15	27	50	80	5500	0.14	550	
HRCL-CQ1005T6N8□F	6.8	22	250	15	27	55	89	5000	0.15	550	
HRCL-CQ1005T7N3□F	7.3	22	250	15	27	54	90	5000	0.16	550	
HRCL-CQ1005T7N5□F	7.5	22	250	15	27	54	90	5000	0.16	550	
HRCL-CQ1005T8N2□F	8.2	22	250	15	27	56	84	5000	0.16	550	
HRCL-CQ1005T8N7□F	8.7	22	250	15	27	53	80	5000	0.17	500	
HRCL-CQ1005T9N1□F	9.1	22	250	15	27	53	79	4500	0.18	500	
HRCL-CQ1005T9N5□F	9.5	22	250	15	27	52	77	4500	0.18	500	
HRCL-CQ1005T10N□F	10	22	250	16	29	52	75	4500	0.18	500	
HRCL-CQ1005T11N□F	11	22	250	16	28	52	71	4000	0.20	500	
HRCL-CQ1005T12N□F	12	22	250	16	29	51	68	4000	0.20	500	
HRCL-CQ1005T15N□F	15	22	250	16	29	50	60	4000	0.22	430	

※□: Please specify the inductance tolerance. For L≤6.2nH, choose B=±0.1nH or C=±0.2nH or S=±0.3nH; For L>6.2nH, choose G=±2% or H=±3% or J=±5%.

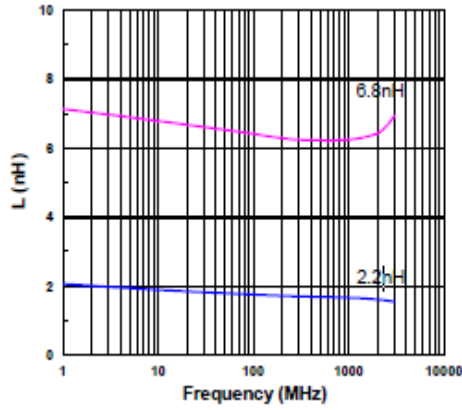
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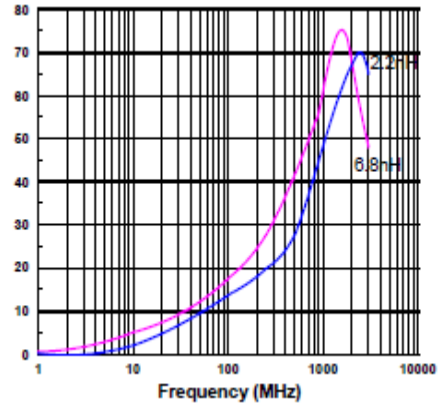
TYPICAL ELECTRICAL CHARACTERISTICS

HRCL-CQ1005 TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



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