

**Features**

- ◆ Monolithic structure for high reliability
- ◆ High self-resonant frequency
- ◆ Excellent solderability and high heat resistance
- ◆ High Q factor

**Applications**

- ◆ RF circuit in telecommunication and other equipments

**Description Of Part Name**

**HRCL** = **C** **H** **0402** **T** **3N0** **B** **F** **XX**  
 A B C D E F G H I

**A**

Type	
HRCL	Chip Ceramic Inductor

**B**

Material Code	
C	Ceramic

**C**

Characteristics Code	
H	

**D**

External Dimensions (L×W) (mm)	
0402 [01005]	0.4×0.2

**E**

Packing	
T	Tape & Reel

**F**

Nominal Inductance	
Example	Nominal Value
3N0	3.0nH
10N	10nH
※R=Point, N=nH	

**G**

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

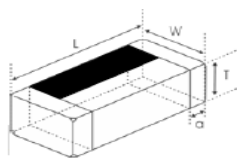
**H**

Hazardous Substance Free Products	
F	

**I**

Internal Code	
XX	

**SHAPE AND DIMENSIONS**



Unit: mm [inch]

Type	L	W	T	a
HRCL-CH [01005]	0.4±0.02 [.016±0008]	0.2±0.02 [.008±0008]	0.2±0.02 [.008±0008]	0.08±0.025 [.003±0010]

The data is reference only. Customers should verify actual device performance in their specific applications. Specifications are subject to change without notice. Please check our website for latest information.  
<http://www.ftind.com>



**SPECIFICATIONS**

**HRCL-CH0402TYPE**

Part Number	Inductance	Min. Quality Factor	L, Q Test Freq.	Typical Q @ Freq. (GHz)					Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
				0.5	0.8	1.8	2.0	2.4			
Units	nH	-	MHz	-					MHz	Ω	mA
Symbol	L	Q	Freq.	Q					S.R.F	DCR	Ir
HRCL-CH0402T1N0□F	1.0	8	500	10	12	19	21	23	11500	0.4	220
HRCL-CH0402T1N1□F	1.1	8	500	11	13	19	22	24	11500	0.4	220
HRCL-CH0402T1N2□F	1.2	8	500	10	12	20	21	23	11500	0.4	220
HRCL-CH0402T1N3□F	1.3	8	500	10	12	19	21	23	11500	0.4	220
HRCL-CH0402T1N4□F	1.4	8	500	11	13	20	21	23	11500	0.4	220
HRCL-CH0402T1N5□F	1.5	8	500	10	13	19	21	24	11500	0.4	220
HRCL-CH0402T1N6□F	1.6	8	500	10	12	19	21	23	11500	0.4	220
HRCL-CH0402T1N7□F	1.7	8	500	11	13	20	21	24	9500	0.5	200
HRCL-CH0402T1N8□F	1.8	8	500	10	12	19	21	23	9000	0.5	200
HRCL-CH0402T1N9□F	1.9	8	500	10	12	20	21	23	9000	0.5	200
HRCL-CH0402TN0□F	2.0	8	500	11	12	19	21	23	9000	0.5	200
HRCL-CH0402T2N1□F	2.1	8	500	10	12	19	22	24	9000	0.5	200
HRCL-CH0402T2N2□F	2.2	8	500	9.5	11	18	20	22	7500	0.55	200
HRCL-CH0402T2N3□F	2.3	8	500	10	12	19	21	23	7500	0.55	200
HRCL-CH0402T2N4□F	2.4	8	500	10	12	19	21	23	7500	0.55	200
HRCL-CH0402T2N5□F	2.5	8	500	9.5	11	18	20	22	7500	0.6	200
HRCL-CH0402T2N6□F	2.6	8	500	11	12	19	21	23	7500	0.6	200
HRCL-CH0402T2N7□F	2.7	8	500	10	12	19	22	24	7500	0.6	200
HRCL-CH0402T2N8□F	2.8	8	500	10	12	19	21	23	7500	0.8	200
HRCL-CH0402T2N9□F	2.9	8	500	10	12	19	21	23	7500	0.8	200
HRCL-CH0402T3N0□F	3.0	8	500	10	12	19	20	23	7500	0.9	200
HRCL-CH0402T3N1□F	3.1	8	500	10	13	19	20	22	7500	0.9	200
HRCL-CH0402T3N2□F	3.2	8	500	9	11	19	20	22	7500	0.9	180
HRCL-CH0402T3N3□F	3.3	8	500	10	13	19	20	23	7500	0.9	180
HRCL-CH0402T3N4□F	3.4	8	500	10	12	19	21	23	7500	1.0	180
HRCL-CH0402T3N5□F	3.5	8	500	10	13	19	21	24	7500	1.0	180
HRCL-CH0402T3N6□F	3.6	8	500	11	12	19	21	23	7500	1.0	180
HRCL-CH0402T3N7□F	3.7	8	500	10	12	19	21	23	7500	1.0	180
HRCL-CH0402T3N8□F	3.8	8	500	10	12	19	21	23	7500	1.0	180
HRCL-CH0402T3N9□F	3.9	8	500	9	11	19	20	22	7500	1.0	180
HRCL-CH0402T4N0□F	4.0	8	500	10	12	19	21	23	7500	1.1	180
HRCL-CH0402T4N1□F	4.1	8	500	11	12	19	21	24	7500	1.1	180
HRCL-CH0402T4N2□F	4.2	8	500	10	12	18	20	22	7500	1.1	180
HRCL-CH0402T4N3□F	4.3	8	500	10	13	19	21	24	7500	1.1	180

The data is reference only. Customers should verify actual device performance in their specific applications. Specifications are subject to change without notice. Please check our website for latest information.



**SPECIFICATIONS**

**HRCL-CH0402TYPE**

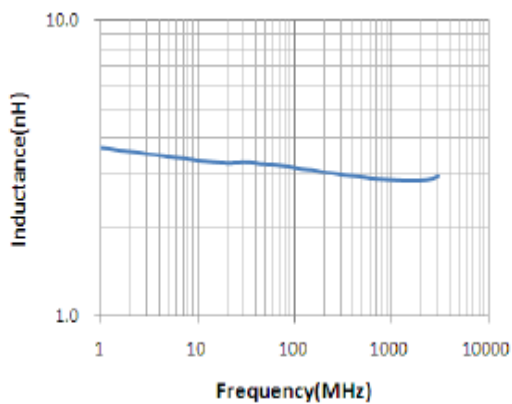
Part Number	Inductance	Min. Quality Factor	L, Q Test Freq.	Typical Q @ Freq. (GHz)					Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
				0.5	0.8	1.8	2.0	2.4			
Units	nH	-	MHz	-					MHz	Ω	mA
Symbol	L	Q	Freq.	Q					S.R.F	DCR	Ir
HRCL-CH0402T4N7□F	4.7	8	500	9	11	19	20	22	6500	1.2	160
HRCL-CH0402T5N1□F	5.1	8	500	10	12	18	19	22	6500	1.3	160
HRCL-CH0402T5N6□F	5.6	8	500	10	12	17	22	24	6000	1.5	140
HRCL-CH0402T6N2□F	6.2	8	500	10	11	18	20	23	5500	1.6	140
HRCL-CH0402T6N8□F	6.8	8	500	10	11	17	20	23	5500	1.8	140
HRCL-CH0402T7N5□F	7.5	8	500	10	13	17	22	24	4500	1.8	140
HRCL-CH0402T8N2□F	8.2	8	500	10	12	18	20	22	4500	2.0	140
HRCL-CH0402T9N1□F	9.1	8	500	10	13	17	21	23	4000	2.0	140
HRCL-CH0402T10N□F	10	8	500	9	12	18	20	21	4000	2.2	140
HRCL-CH0402T11N□F	11	8	500	9	12	18	19	20	4000	2.4	140
HRCL-CH0402T12N□F	12	8	500	9	12	17	18	18	4000	2.4	140
HRCL-CH0402T13N□F	13	7	500	8	12	17	18	18	3500	3.0	140
HRCL-CH0402T15N□F	15	7	500	8	12	16	15	14	3000	3	140
HRCL-CH0402T16N□F	16	7	500	8	11	13	12	11	2500	3.2	140
HRCL-CH0402T17N□F	18	7	500	7.5	10	12	10	9	2500	3.2	140
HRCL-CH0402T18N□F	20	6	500	7	9	11	9	7	2500	4.5	120

※ □: Please specify the inductance tolerance. For  $L \leq 4.2\text{nH}$ , choose  $B = \pm 0.1\text{nH}$ ,  $C = \pm 0.2\text{nH}$  or  $S = \pm 0.3\text{nH}$ ; For  $4.2\text{nH} < L < 5.6\text{nH}$ , choose,  $H = \pm 3\%$ ,  $J = \pm 5\%$ . or  $S = \pm 0.3\text{nH}$ ; For  $L \geq 5.6\text{nH}$ , choose,  $H = \pm 3\%$ ,  $J = \pm 5\%$ .

**TYPICAL ELECTRICAL**

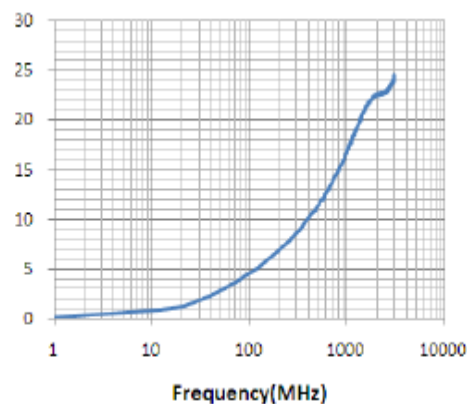
Inductance vs. Frequency Characteristics

HRCL-CH0402T3N0□F



Q vs. Frequency Characteristics

HRCL-CH0402T3N0□F



The data is reference only. Customers should verify actual device performance in their specific applications. Specifications are subject to change without notice. Please check our website for latest information. <http://www.ftind.com>