

Features

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

Applications

- ◆ RF circuit in telecommunication and other equipments

Description Of Part Name

HRCL **-** **C** **D** **1608** **T** **10N** **J** **F** **XX**
 A B C D E F G H I

A

Type	
HRCL	Chip Ceramic Inductor

B

Material Code	
C	Ceramic

C

Feature Code	
D	

D

External Dimensions (L×W) (mm)	
1005 [0402]	1.0×0.5
1608 [0603]	1.6×0.8

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%

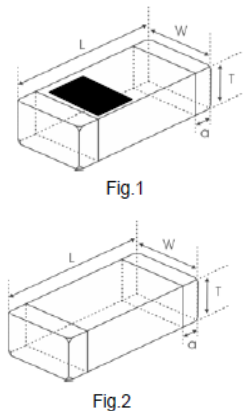
H

Hazardous Substance Free Products	
F	

I

Internal Code	
XX	

SHAPE AND DIMENSIONS



Unit: mm [inch]

Type	L	W	T	a	
HRCL-CD1005 [0402]	1.0±0.15 [.039±006]	0.5±0.15 [.020±006]	0.5±0.15 [.020±006]	0.25±0.1 [.010±004]	Fig.1
HRCL-CD1608 [0603]	1.6±0.15 [.063±006]	0.8±0.15 [.031±006]	0.8±0.15 [.031±006]	0.3±0.2 [.012±008]	Fig.2

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-CD1005 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
				100	800	1000			
Units Symbol	nH L	- Q	MHz Freq.	- Q			MHz S.R.F	Ω DCR	mA Ir
HRCL-CD1005T1N0SF	1.0±0.3	8	100	11	34	36	10000	0.10	400
HRCL-CD1005T1N1SF	1.1±0.3	8	100	11	34	36	10000	0.10	400
HRCL-CD1005T1N2SF	1.2±0.3	8	100	11	34	36	10000	0.10	400
HRCL-CD1005T1N3SF	1.3±0.3	8	100	11	34	36	10000	0.10	400
HRCL-CD1005T1N5SF	1.5±0.3	8	100	11	34	36	6000	0.10	300
HRCL-CD1005T1N6SF	1.6±0.3	8	100	11	32	35	6000	0.10	300
HRCL-CD1005T1N8SF	1.8±0.3	8	100	11	30	34	6000	0.10	300
HRCL-CD1005T2N0SF	2.0±0.3	8	100	10	29	33	6000	0.20	300
HRCL-CD1005T2N2SF	2.2±0.3	8	100	10	29	33	6000	0.20	300
HRCL-CD1005T-2N4SF	2.4±0.3	8	100	10	29	32	6000	0.20	300
HRCL-CD1005T2N7SF	2.7±0.3	8	100	10	29	32	6000	0.20	300
HRCL-CD1005T3N0SF	3.0±0.3	8	100	10	29	32	6000	0.20	300
HRCL-CD1005T3N3SF	3.3±0.3	8	100	10	29	32	6000	0.20	300
HRCL-CD1005T3N6SF	3.6±0.3	8	100	10	28	31	4000	0.20	300
HRCL-CD1005T3N9SF	3.9±0.3	8	100	10	28	31	4000	0.20	300
HRCL-CD1005T4N3SF	4.3±0.3	8	100	10	28	31	4000	0.20	300
HRCL-CD1005T4N7SF	4.7±0.3	8	100	10	28	31	4000	0.20	300
HRCL-CD1005T5N1SF	5.1±0.3	8	100	10	28	30	4000	0.30	300
HRCL-CD1005T5N6SF	5.6±0.3	8	100	10	28	30	4000	0.30	300
HRCL-CD1005T6N2SF	6.2±0.3	8	100	10	27	30	3900	0.30	300
HRCL-CD1005T6N8□F	6.8	8	100	10	27	30	3900	0.30	300
HRCL-CD1005T7N5□F	7.5	8	100	10	27	30	3700	0.40	300
HRCL-CD1005T8N2□F	8.2	8	100	10	27	30	3600	0.40	300
HRCL-CD1005T9N1□F	9.1	8	100	10	27	30	3400	0.40	300
HRCL-CD1005T10N□F	10	8	100	10	27	30	3200	0.40	300
HRCL-CD1005T12N□F	12	8	100	10	26	29	2700	0.50	300
HRCL-CD1005T15N□F	15	8	100	10	26	28	2300	0.50	300
HRCL-CD1005T18N□F	18	8	100	10	25	27	2100	0.60	300
HRCL-CD1005T20N□F	20	8	100	10	25	26	2000	0.60	300
HRCL-CD1005T22N□F	22	8	100	10	25	25	1900	0.60	300
HRCL-CD1005T27N□F	27	8	100	10	25	23	1600	0.70	300
HRCL-CD1005T33N□F	33	8	100	10	22	22	1300	0.80	200
HRCL-CD1005T39N□F	39	8	100	10	22	19	1200	1.00	200
HRCL-CD1005T43N□F	43	8	100	10	21	16	1100	1.10	200
HRCL-CD1005T47N□F	47	8	100	10	21	16	1000	1.10	200
HRCL-CD1005T56N□F	56	8	100	10	18	13	750	1.20	200
HRCL-CD1005T68N□F	68	8	100	10	18	9	750	1.40	180
HRCL-CD1005T82N□F	82	8	100	10	13	-	750	2.40	150
HRCL-CD1005TR10□F	100	8	100	10	12	-	700	2.60	150
HRCL-CD1005TR12□F	120	8	100	10	-	-	600	2.80	150
HRCL-CD1005TR15□F	150	8	100	10	-	-	550	3.20	100
HRCL-CD1005TR18□F	180	8	100	10	-	-	500	3.70	100
HRCL-CD1005TR22□F	220	8	100	12	-	-	450	4.00	100
HRCL-CD1005TR27□F	270	8	100	12	-	-	400	4.50	100
HRCL-CD1005TR30□F	300	6	50	12	-	-	350	7.00	50
HRCL-CD1005TR33□F	330	6	50	8	-	-	350	7.00	50
HRCL-CD1005TR36□F	360	6	50	8	-	-	300	7.50	50

※□: Please specify the inductance tolerance code (J=±5%, K=±10%). The product with tolerance less than ±5%, ±10% is also available. Please contact your local sales.

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SPECIFICATIONS

HRCL-CD1608 TYPE

Part Number	Inductance	Min. Quality Factor	L, Q Test Freq.	Typical Q @ Freq. (GHz)			Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
				100	800	1000			
Units Symbol	nH L	- Q	MHz Freq.	-			MHz S.R.F	Ω DCR	mA I _r
HRCL-CD1608T1N0SF	1.0±0.3	8	100	13	70	80	10000	0.05	500
HRCL-CD1608T1N2SF	1.2±0.3	8	100	13	60	70	10000	0.05	500
HRCL-CD1608T1N5SF	1.5±0.3	8	100	13	47	68	6000	0.10	500
HRCL-CD1608T1N8SF	1.8±0.3	8	100	13	45	61	6000	0.10	500
HRCL-CD1608T2N2SF	2.2±0.3	8	100	13	45	60	6000	0.10	500
HRCL-CD1608T2N7SF	2.7±0.3	10	100	13	44	55	6000	0.12	500
HRCL-CD1608T3N3SF	3.3±0.3	10	100	13	43	50	6000	0.15	500
HRCL-CD1608T3N9SF	3.9±0.3	10	100	13	43	50	6000	0.16	500
HRCL-CD1608T4N7SF	4.7±0.3	10	100	13	43	50	6000	0.20	500
HRCL-CD1608T5N6STF	5.6±0.3	10	100	14	42	48	5000	0.25	500
HRCL-CD1608T6N8□F	6.8	10	100	14	43	50	5000	0.30	500
HRCL-CD1608T8N2□F	8.2	10	100	14	43	48	4500	0.35	500
HRCL-CD1608T10N□F	10	12	100	15	45	50	3500	0.40	300
HRCL-CD1608T12N□F	12	12	100	18	48	50	3000	0.45	300
HRCL-CD1608T15N□F	15	12	100	18	48	50	2300	0.50	300
HRCL-CD1608T18N□F	18	12	100	16	48	51	2200	0.55	300
HRCL-CD1608T22N□F	22	12	100	16	45	48	2000	0.60	300
HRCL-CD1608T27N□F	27	12	100	16	45	45	1700	0.65	300
HRCL-CD1608T33N□F	33	12	100	16	45	41	1500	0.70	300
HRCL-CD1608T39N□F	39	12	100	17	40	48	1400	0.70	300
HRCL-CD1608T47N□F	47	12	100	17	35	35	1200	0.70	300
HRCL-CD1608T56N□F	56	12	100	17	35	30	1100	0.75	300
HRCL-CD1608T68N□F	68	12	100	17	30	20	900	0.85	300
HRCL-CD1608T82N□F	82	8	100	15	22	-	800	1.00	300
HRCL-CD1608TR10□F	100	8	100	15	16	-	700	1.20	300
HRCL-CD1608TR12□F*	120	8	50	15	-	-	600	1.40	200
HRCL-CD1608TR15□F*	150	8	50	15	-	-	500	1.60	200
HRCL-CD1608TR18□F*	180	8	50	15	-	-	400	1.90	200
HRCL-CD1608TR22□F*	220	8	50	15	-	-	350	2.40	200
HRCL-CD1608TR27□F*	270	8	50	16	-	-	350	2.60	150
HRCL-CD1608TR33□F*	330	8	50	16	-	-	350	2.80	150
HRCL-CD1608TR39□F*	390	8	50	16	-	-	300	3.20	150
HRCL-CD1608TR43□F*	430	8	50	16	-	-	280	3.40	150
HRCL-CD1608TR47□F*	470	8	50	15	-	-	250	3.60	150
HRCL-CD1608TR56□F*	560	8	50	15	-	-	250	4.00	100
HRCL-CD1608TR68□F*	680	8	50	15	-	-	250	4.50	100

※□: Please specify the inductance tolerance code (J=±5%, K=±10%). The product with tolerance less than ±5%, ±10% is also available. Please contact your local sales.

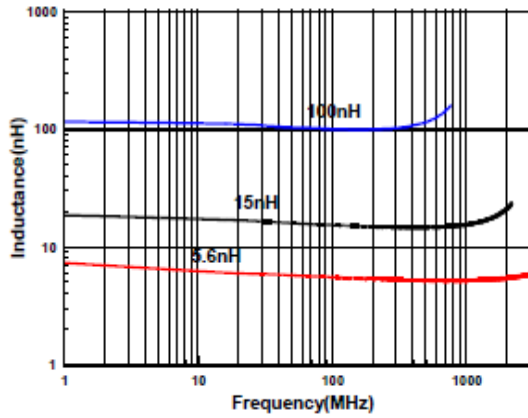
※*: The length: 1.65±0.15mm, for others: 1.60±0.15mm.

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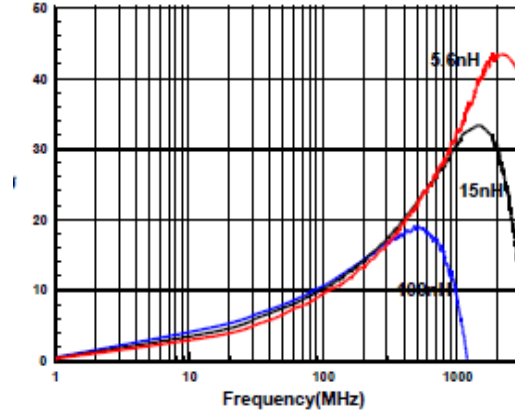


TYPICAL ELECTRICAL CHARACTERISTICS

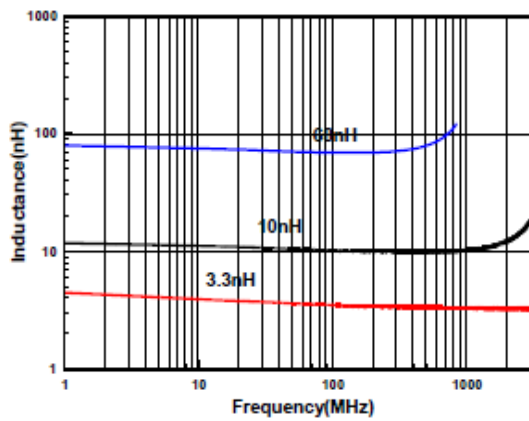
HRCL-CD1005 TYPE



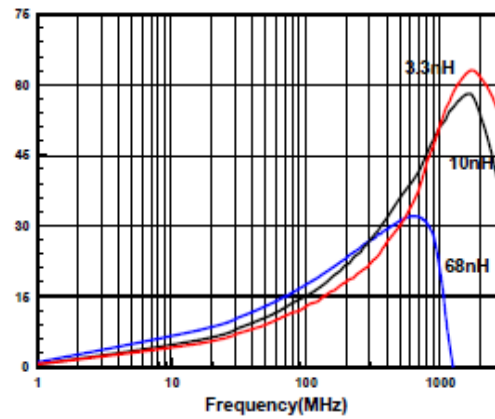
HRCL-CD1005 TYPE



HRCL-CD1608 TYPE



HRCL-CD1608 TYPE



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