

MULTILAYER CHIP RF INDUCTOR

OPERATING TEMP.	0402		
	0603	-55	+125
	1005		
	1608	-40	+85
	2012		



FEATURES

- High self-resonant frequency.
- Multilayer monolithic construction yields high reliability
- Excellent solderability and heat resistance for reflow soldering.

APPLICATIONS

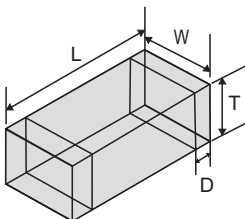
- PHS PDA
- Portable telephone Interphone PHS and PDA
- Miscellaneous high-frequency circuits
- EMI countermeasure in high frequency circuits

ORDERING CODE

VHF 060303 HQ 3N3 S T

Product Code		(L x W x T) (mm) Dimensions		Material Code	(nH) Inductance		Tolerance		Packaging Style	
VHF	Multilayer Chip Ceramic Inductor	060303	1.0 x 0.5 x 0.5	H	1N0	1.0	B	± 0.1nH	T	Tape & Reel
		100505	1.2 x 0.6 x 0.5	HQ	10N	10	C	± 0.2nH		
		160808	1.6 x 0.8 x 0.15		R10	100	S	± 0.3nH	B	Bulk
		201209	2.0 x 1.2 x 0.2		N 0.0(nH) R = 0.0(μH)		G	± 2%		
							H	± 3%		
							J	± 5%		

SHAPE AND DIMENSIONS



unit mm(inch)

Part No.	L	W	T	D
	0.4 ± 0.02 (0.016 ± 0.0008)	0.2 ± 0.02 (0.008 ± 0.0008)	0.2 ± 0.02 (0.008 ± 0.0008)	0.08 ± 0.025 (0.003 ± 0.0010)
	0.6 ± 0.03 (0.024 ± 0.001)	0.3 ± 0.03 (0.012 ± 0.001)	0.3 ± 0.03 (0.012 ± 0.001)	0.15 ± 0.05 (0.006 ± 0.002)
100505 (0402)	1.0 ± 0.05 (0.040 ± 0.002)	0.5 ± 0.05 (0.020 ± 0.002)	0.5 ± 0.05 (0.020 ± 0.002)	0.25 ± 0.10 (0.010 ± 0.004)
160808 (0603)	1.6 ± 0.15 (0.063 ± 0.006)	0.8 ± 0.15 (0.031 ± 0.006)	0.8 ± 0.15 (0.031 ± 0.006)	0.3 ± 0.2 (0.01 ± 0.008)
201209 (0805)	2.0 ± 0.2 (0.079 ± 0.008)	1.2 ± 0.2 (0.047 ± 0.008)	0.9 ± 0.2 (0.035 ± 0.008)	0.5 ± 0.3 (0.020 ± 0.012)

0402 TYPE

Part No.	Inductance (nH)	Q (Min)	Test Fre. ()	Q Frequency (MHz)					諧 頻 SRF (MHz)Min	電 DC R ()Max	額 電 Ir(mA) Max

ELECTRICAL CHARACTERISTICS

1005 TYPE $L_s < 6.8nH$, □ “B/C/S” , $L_s \geq 6.8nH$, □ “G/H/J” 。
 For $L_s < 6.8nH$, □ choose “B/C/S” , For $L_s \geq 6.8nH$, □ choose “G/H/J” .

Part No.	Inductance (nH)	Q (Min)	Test Fre. (MHz)	Q Frequency (MHz)					SRF (MHz)Min	DC R ()Max	Ir(mA) Max
				500	800	1800	2000	2400			
VHF100505HQ1N0□T	1.0	8	100	22	30	48	50	58	10000	0.06	1000
VHF100505HQ1N1□T	1.1	8	100	23	29	47	50	57	10000	0.07	1000
VHF100505HQ1N2□T	1.2	8	100	23	29	48	50	56	10000	0.07	1000
VHF100505HQ1N3□T	1.3	8	100	22	29	44	47	53	10000	0.07	1000
VHF100505HQ1N5□T	1.5	8	100	23	29	47	50	56	6000	0.08	1000
VHF100505HQ1N6□T	1.6	8	100	23	29	46	49	54	6000	0.08	1000
VHF100505HQ1N8□T	1.8	8	100	20	30	41	43	49	6000	0.08	900
VHF100505HQ2N0□T	2.0	8	100	21	29	41	43	48	6000	0.09	900
VHF100505HQ2N2□T	2.2	8	100	22	29	44	47	52	6000	0.09	900
VHF100505HQ2N4□T	2.4	8	100	21	29	42	44	49	6000	0.10	800
VHF100505HQ2N7□T	2.7	8	100	22	29	43	45	50	6000	0.12	800
VHF100505HQ3N0□T	3.0	8	100	24	29	47	49	54	6000	0.12	800
VHF100505HQ3N3□T	3.3	8	100	24	30	46	48	53	6000	0.13	800
VHF100505HQ3N6□T	3.6	8	100	21	28	40	42	46	4000	0.15	700
VHF100505HQ3N9□T	3.9	8	100	22	28	43	45	50	4000	0.16	700
VHF100505HQ4N3□T	4.3	8	100	24	29	47	49	53	4000	0.16	700
VHF100505HQ4N7□T	4.7	8	100	23	29	45	47	50	4000	0.16	700
VHF100505HQ5N1□T	5.1	8	100	23	29	42	43	44	4000	0.16	600
VHF100505HQ5N6□T	5.6	8	100	22	28	42	43	45	4000	0.20	600
VHF100505HQ6N2□T	6.2	8	100	24	29	42	43	43	3900	0.20	600
VHF100505HQ6N8□T	6.8	8	100	23	28	40	41	41	3900	0.20	600
VHF100505HQ7N5□T	7.5	8	100	24	30	41	41	39	3700	0.24	500
VHF100505HQ8N2□T	8.2	8	100	23	28	38	38	36	3600	0.24	500
VHF100505HQ9N1□T	9.1	8	100	24	30	40	39	36	3400	0.26	500
VHF100505HQ10N□T	10.0	8	100	24	30	37	36	31	3200	0.26	500
VHF100505HQ12N□T	12	8	100	23	29	33	31	-	2700	0.50	400
VHF100505HQ15N□T	15	8	100	23	28	29	26	-	2300	0.50	400
VHF100505HQ18N□T	18	8	100	23	28	26	-	-	2100	0.60	350
VHF100505HQ20N□T	20	8	100	21	27	21	-	-	2000	0.60	350
VHF100505HQ22N□T	22	8	100	22	27	-	-	-	1900	0.60	350
VHF100505HQ27N□T	27	8	100	20	25	-	-	-	1600	0.70	300
VHF100505HQ33N□T	33	8	100	20	23	-	-	-	1300	0.80	300
VHF100505HQ39N□T	39	8	100	20	22	-	-	-	1200	1.00	250
VHF100505HQ43N□T	43	8	100	20	21	-	-	-	1100	1.10	250
VHF100505HQ47N□T	47	8	100	19	21	-	-	-	1000	1.10	250
VHF100505HQ56N□T	56	8	100	19	18	-	-	-	750	1.20	200
VHF100505HQ68N□T	68	8	100	17	18	-	-	-	750	1.40	200
VHF100505HQ82N□T	82	8	100	16	-	-	-	-	750	1.60	200
VHF100505HQR10□T	100	8	100	14	-	-	-	-	700	2.00	200
VHF100505HQR12□T	120	8	100	12	-	-	-	-	600	2.50	150
VHF100505HQR15□T	150	8	100	11	-	-	-	-	550	3.00	150
VHF100505HQR18□T	180	8	100	-	-	-	-	-	500	3.50	150
VHF100505HQR22□T	220	8	100	-	-	-	-	-	450	3.70	100
VHF100505HQR27□T	270	8	100	-	-	-	-	-	400	4.50	100
VHF100505HQR33□T	330	6	50	-	-	-	-	-	350	5.00	80
VHF100505HQR36□T	360	6	50	-	-	-	-	-	300	6.00	80

1608 TYPE

				100	800	1000			
VHF160808H1N0ST	1.0	8	100	14	50	60	10000	0.05	
VHF160808H1N2ST	1.2	8	100	14	50	65	10000	0.05	
VHF160808H1N5ST	1.5	8	100	13	42	62	6000	0.10	
VHF160808H1N8ST	1.8	8	100	13	40	56	6000	0.10	
VHF160808H2N0ST	2.0	8	100	13	38	54	6000	0.10	
VHF160808H2N2ST	2.2	8	100	13	38	54	6000	0.10	
VHF160808H2N4ST	2.4	8	100	13	36	52	6000	0.12	
VHF160808H2N7ST	2.7	10	100	12	36	52	6000	0.12	
VHF160808H3N0ST	3.0	10	100	12	35	50	6000	0.15	
VHF160808H3N3ST	3.3	10	100	12	35	50	6000	0.15	
VHF160808H3N6ST	3.6	10	100	13	35	50	6000	0.16	
VHF160808H3N9ST	3.9	10	100	12	34	50	6000	0.16	
VHF160808H4N3ST	4.3	10	100	13	33	50	6000	0.18	
VHF160808H4N7ST	4.7	10	100	13	33	50	6000	0.20	
VHF160808H5N1ST	5.1	10	100	13	32	48	5500	0.25	
VHF160808H5N6ST	5.6	10	100	14	32	48	5000	0.25	
VHF160808H6N8JT	6.8	10	100	14	32	50	5000	0.30	
VHF160808H7N5JT	7.5	10	100	14	32	48	4500	0.35	
VHF160808H8N2JT	8.2	10	100	14	30	48	4500	0.35	
VHF160808H9N1JT	9.1	10	100	14	30	48	3500	0.40	
VHF160808H10NJT	10	12	100	15	29	50	3500	0.40	
VHF160808H12NJT	12	12	100	14	29	50	3000	0.45	
VHF160808H15NJT	15	12	100	15	29	50	2300	0.50	
VHF160808H18NJT	18	12	100	16	29	51	2200	0.55	
VHF160808H22NJT	22	12	100	16	28	48	2000	0.60	
VHF160808H27NJT	27	12	100	16	28	45	1700	0.65	
VHF160808H33NJT	33	12	100	16	28	41	1500	0.70	
VHF160808H39NJT	39	12	100	17	28	48	1400	0.70	
VHF160808H47NJT	47	12	100	17	28	35	1200	0.70	
VHF160808H56NJT	56	12	100	17	26	30	1100	0.75	
VHF160808H68NJT	68	12	100	17	26	20	900	0.85	
VHF160808H82NJT	82	8	100	15	22	-	800	1.00	
VHF160808HR10JT	100	8	100	15	16	-	700	1.20	
VHF160808HR12JT	120	8	50	15	-	-	600	1.40	
VHF160808HR15JT	150	8	50	15	-	-	500	1.60	
VHF160808HR18JT	180	8	50	15	-	-	400	1.90	
VHF160808HR22JT	220	8	50	15	-	-	350	2.40	
VHF160808HR27JT	270	8	50	16	-	-	350	2.60	
VHF160808HR33JT	330	8	50	16	-	-	350	2.80	
VHF160808HR39JT	390	8	50	16	-	-	300	3.20	
VHF160808HR43JT	430	8	50	16	-	-	280	3.40	
VHF160808HR47JT	470	8	50	15	-	-	250	3.60	

1608 TYPE

				100	800	1000			
VHF160808HQ1N0ST	1.0	8	100	13	65	75	10000	0.05	500
VHF160808HQ1N2ST	1.2	8	100	13	60	70	10000	0.05	500
VHF160808HQ1N5ST	1.5	8	100	13	47	65	6000	0.10	500
VHF160808HQ1N8ST	1.8	8	100	13	45	61	6000	0.10	500
VHF160808HQ2N0ST	2.0	8	100	13	45	60	6000	0.10	500
VHF160808HQ2N2ST	2.2	8	100	13	45	60	6000	0.10	500
VHF160808HQ2N4ST	2.4	8	100	13	44	55	6000	0.12	500
VHF160808HQ2N7ST	2.7	10	100	13	44	55	6000	0.12	500
VHF160808HQ3N3ST	3.3	10	100	13	43	50	6000	0.15	500
VHF160808HQ3N6ST	3.6	10	100	13	43	48	6000	0.16	500
VHF160808HQ3N9ST	3.9	10	100	13	43	48	6000	0.16	500
VHF160808HQ4N3ST	4.3	10	100	13	43	50	6000	0.18	500
VHF160808HQ4N7ST	4.7	10	100	13	43	50	6000	0.20	500
VHF160808HQ5N1ST	5.1	10	100	13	42	48	5500	0.25	500
VHF160808HQ5N6ST	5.6	10	100	14	42	48	5000	0.25	500
VHF160808HQ6N8JT	6.8	10	100	14	43	50	5000	0.30	500
VHF160808HQ7N5JT	7.5	10	100	14	43	48	4500	0.35	500
VHF160808HQ8N2JT	8.2	10	100	14	43	48	4500	0.35	500
VHF160808HQ9N1JT	9.1	10	100	14	43	48	3500	0.40	500
VHF160808HQ10NJT	10	12	100	15	45	50	3500	0.40	300
VHF160808HQ12NJT	12	12	100	18	48	50	3000	0.45	300
VHF160808HQ15NJT	15	12	100	18	48	50	2300	0.50	300
VHF160808HQ18NJT	18	12	100	16	48	51	2200	0.55	300
VHF160808HQ22NJT	22	12	100	16	45	48	2000	0.60	300
VHF160808HQ27NJT	27	12	100	16	45	45	1700	0.65	300
VHF160808HQ33NJT	33	12	100	16	45	41	1500	0.70	300
VHF160808HQ39NJT	39	12	100	17	40	48	1400	0.70	300
VHF160808HQ47NJT	47	12	100	17	35	35	1200	0.70	300
VHF160808HQ56NJT	56	12	100	17	35	30	1100	0.75	300
VHF160808HQ68NJT	68	12	100	17	30	20	900	0.85	300
VHF160808HQ82NJT	82	8	100	15	22	-	800	1.00	300
VHF160808HQR10JT	100	8	100	15	16	-	700	1.20	300
VHF160808HQR12JT	120	8	50	15	-	-	600	1.40	200
VHF160808HQR15JT	150	8	50	15	-	-	500	1.60	200
VHF160808HQR18JT	180	8	50	15	-	-	400	1.90	200
VHF160808HQR22JT	220	8	50	15	-	-	350	2.40	200
VHF160808HQR27JT	270	8	50	16	-	-	350	2.60	150
VHF160808HQR33JT	330	8	50	16	-	-	350	2.80	150
VHF160808HQR39JT	390	8	50	16	-	-	300	3.20	150
VHF160808HQR43JT	430	8	50	16	-	-	280	3.40	150
VHF160808HQR47JT	470	8	50	15	-	-	250	3.60	150

疊層片式高頻電感 MULTILAYER CHIP RF INDUCTOR

ELECTRICAL CHARACTERISTICS

2012 TYPE

Part No.	Inductance (nH)	Q (Min)	Test Fre. (MHz)	Q Frequency (MHz)			SRF (MHz)Min	DC R ()Max	Ir(mA) Max
				100	800	1000			
VHF201209HIN5ST	1.5	10	100	21	50	70	6000	0.10	500
VHF201209HIN8ST	1.8	10	100	20	48	70	6000	0.10	500
VHF201209H2N2ST	2.2	10	100	20	48	70	6000	0.10	500
VHF201209H2N7ST	2.7	12	100	18	48	70	5500	0.10	500
VHF201209H3N3ST	3.3	12	100	18	48	65	5000	0.13	500
VHF201209H3N9ST	3.9	12	100	18	50	65	4500	0.15	500
VHF201209H4N7ST	4.7	12	100	18	50	65	4000	0.20	500
VHF201209H5N6ST	5.6	15	100	18	48	65	3500	0.23	500
VHF201209H6N8JT	6.8	15	100	18	48	65	3000	0.25	500
VHF201209H8N2JT	8.2	15	100	20	50	65	2500	0.28	500
VHF201209H10NJT	10	15	100	21	50	65	2200	0.30	500
VHF201209H12NJT	12	15	100	20	48	65	2000	0.35	500
VHF201209H15NJT	15	15	100	20	48	65	1800	0.40	500
VHF201209H18NJT	18	15	100	22	48	60	1600	0.45	300
VHF201209H22NJT	22	15	100	19	48	45	1500	0.50	300
VHF201209H27NJT	27	15	100	19	48	38	1400	0.55	300
VHF201209H33NJT	33	15	100	19	48	30	1300	0.60	300
VHF201209H39NJT	39	15	100	19	45	26	1100	0.65	300
VHF201209H47NJT	47	18	100	23	43	20	1000	0.70	300
VHF201209H56NJT	56	18	100	22	39	10	900	0.75	300
VHF201209H68NJT	68	18	100	22	30	-	850	0.80	300
VHF201209H82NJT	82	18	100	22	-	-	800	0.90	300
VHF201209HR10JT	100	18	100	22	-	-	700	0.90	300
VHF201209HR12JT	120	13	50	19	-	-	600	0.95	300
VHF201209HR15JT	150	13	50	19	-	-	550	1.20	300
VHF201209HR18JT	180	13	50	19	-	-	500	1.30	300
VHF201209HR22JT	220	12	50	20	-	-	400	1.50	300
VHF201209HR27JT	270	12	50	20	-	-	350	1.80	300
VHF201209HR33JT	330	12	50	18	-	-	300	2.00	300
VHF201209HR39JT	390	10	50	17	-	-	250	2.00	300
VHF201209HR47JT	470	10	50	17	-	-	200	2.00	300

ELECTRICAL CHARACTERISTICS

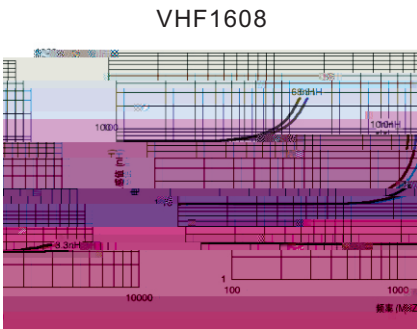
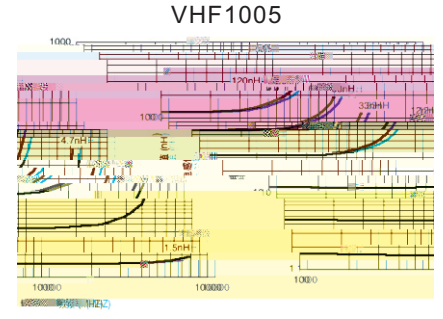
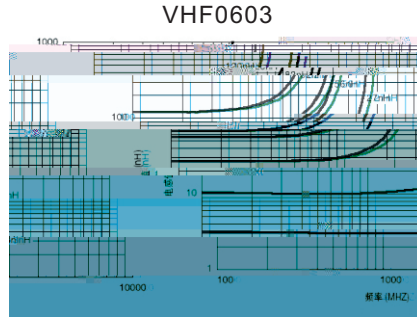
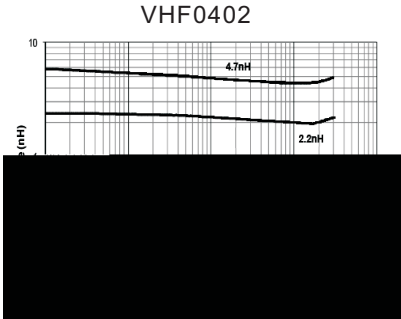
2012 TYPE

Part No.	Inductance (nH)	Q (Min)	Test Fre. (MHz)	Q Frequency (MHz)			SRF (MHz)Min	DC R ()Max	Ir(mA) Max
				100	800	1000			
VHF201209HQIN5ST	1.5	10	100	21	61	85	6000	0.10	500
VHF201209HQIN8ST	1.8	10	100	20	55	80	6000	0.10	500
VHF201209HQ2N2ST	2.2	10	100	20	53	75	6000	0.10	500
VHF201209HQ2N7ST	2.7	12	100	18	56	70	5500	0.10	500
VHF201209HQ3N3ST	3.3	12	100	18	54	65	5000	0.13	500
VHF201209HQ3N9ST	3.9	12	100	18	54	60	4500	0.15	500
VHF201209HQ4N7ST	4.7	12	100	18	55	65	4000	0.20	500
VHF201209HQ5N6ST	5.6	15	100	18	60	66	3500	0.23	500
VHF201209HQ6N8JT	6.8	15	100	18	63	68	3000	0.25	500
VHF201209HQ8N2JT	8.2	15	100	20	63	70	2500	0.28	500
VHF201209HQ10NJT	10	15	100	21	60	70	2200	0.30	500
VHF201209HQ12NJT	12	15	100	20	60	70	2000	0.35	500
VHF201209HQ15NJT	15	15	100	20	63	65	1800	0.40	500
VHF201209HQ18NJT	18	15	100	22	63	60	1600	0.45	300
VHF201209HQ22NJT	22	15	100	19	60	45	1500	0.50	300
VHF201209HQ27NJT	27	15	100	19	58	38	1400	0.55	300
VHF201209HQ33NJT	33	15	100	19	55	30	1300	0.60	300
VHF201209HQ39NJT	39	15	100	19	47	26	1100	0.65	300
VHF201209HQ47NJT	47	18	100	23	43	20	1000	0.70	300
VHF201209HQ56NJT	56	18	100	22	39	10	900	0.75	300
VHF201209HQ68NJT	68	18	100	22	30	-	850	0.80	300
VHF201209HQ82NJT	82	18	100	22	-	-	800	0.90	300
VHF201209HQR10JT	100	18	100	22	-	-	700	0.90	300
VHF201209HQR12JT	120	13	50	19	-	-	600	0.95	300
VHF201209HQR15JT	150	13	50	19	-	-	550	1.20	300
VHF201209HQR18JT	180	13	50	19	-	-	500	1.30	300
VHF201209HQR22JT	220	12	50	20	-	-	400	1.50	300
VHF201209HQR27JT	270	12	50	20	-	-	350	1.80	300
VHF201209HQR33JT	330	12	50	18	-	-	300	2.00	300
VHF201209HQR39JT	390	10	50	17	-	-	250	2.00	300
VHF201209HQR47JT	470	10	50	17	-	-	200	2.00	300

叠层片式高频电感 MULTILAYER CHIP RF INDUCTOR

CHARACTERISTICS CURVES

Inductance VS. Frequency



Q Value VS. Frequency

