FEATURES

HFI chip inductors are Jaro's line of high frequency ceramic chip inductors. We have developed highly reliable and versatile chip inductors that will meet your high frequency design requirements.

- **High Frequency Range**
  HFI chip inductors have a ceramic material construction that extends the effective frequency range to 10GHz.
- **Multiple Size Availability**
  HFI chip inductors are available in three compact sizes: 060303,100505, 160808 and 201209.
- **High Q characteristics**
  H-series HFI chip inductors exhibit higher Q at high frequency.

APPLICATIONS

HFI chip inductors can be used in a variety of electronics including:

- Cellular Phones
- Pager
- High-Speed Communication Devices
- WALN and RF module

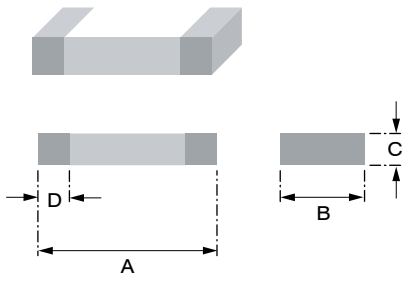
PRODUCT IDENTIFICATION

1	2	3	4	5	6
HFI -	160808 -	1N2	S	□□	-P

Product Code
Dimensions (in mm)
Inductance Code
Tolerance Code
Pattern Code
RoHS Code

Code	Tolerance
G	±2%
J	±5%
K	±10%
C	±0.2nH
S	±0.3nH

PRODUCT DIMENSIONS



NOTE: Dimension in mm (inch)

PRODUCT NO.	A	B	C	D
HFI-201209 (0805)	2.0±0.20 (0.079±0.008)	1.2±0.20 (0.047±0.008)	0.9±0.20 (0.035±0.008)	0.5±0.30 (0.020±0.012)
HFI-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±0.20 (0.012±0.008)
HFI-100505 (0402)	1.0±0.10 (0.039±0.004)	0.5±0.10 (0.020±0.004)	0.5±0.10 (0.020±0.004)	0.25±0.10 (0.010±0.004)
HFI-060303 (0201)	0.6±0.03 (0.024±0.001)	0.33max. (0.012max.)	0.33max. (0.012max.)	0.15±0.05 (0.006±0.002)

PRODUCT SPECIFICATIONS

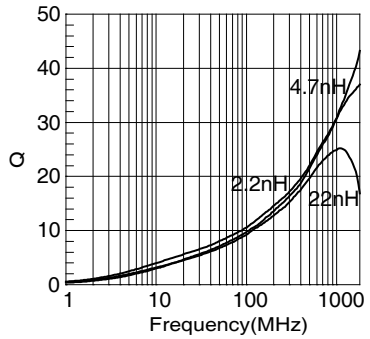
PART NUMBER	Inductance (nH) at 100 MHz	Tolerance	Q Min.	Q Typical			S.R.F.(MHz) Min.	R_{DC} (Ω) Max.	Rated Current (mA) Max.
			100 MHz	100 MHz	500 MHz	800 MHz			
HFI-060303-0N3□	0.3	C	4	5	13	18	10000	0.07	250
HFI-060303-0N4□	0.4	C	4	5	13	18	10000	0.07	250
HFI-060303-0N5□	0.5	C	4	5	13	18	10000	0.08	250
HFI-060303-0N6□	0.6	C	4	5	13	18	10000	0.08	250
HFI-060303-0N7□	0.7	C	4	5	13	18	10000	0.09	250
HFI-060303-0N8□	0.8	C	4	5	13	18	10000	0.10	250
HFI-060303-0N9□	0.9	C	4	5	13	18	10000	0.10	250
HFI-060303-1N0□	1.0	C,S	4	5	15	19	10000	0.14	250
HFI-060303-1N1□	1.1	C,S	4	6	15	20	10000	0.14	250
HFI-060303-1N2□	1.2	C,S	4	6	15	20	10000	0.14	250
HFI-060303-1N3□	1.3	C,S	4	6	15	20	10000	0.14	250
HFI-060303-1N5□	1.5	C,S	4	6	15	20	10000	0.18	230
HFI-060303-1N6□	1.6	C,S	4	6	15	20	10000	0.18	230
HFI-060303-1N8□	1.8	C,S	4	6	15	20	10000	0.19	200
HFI-060303-2N0□	2.0	C,S	4	6	15	20	8800	0.20	200
HFI-060303-2N2□	2.2	C,S	4	6	15	20	8800	0.22	200
HFI-060303-2N4□	2.4	C,S	4	6	15	20	8300	0.24	200
HFI-060303-2N7□	2.7	C,S	5	6	16	20	7700	0.25	200
HFI-060303-3N0□	3.0	C,S	5	6	16	20	7200	0.28	180
HFI-060303-3N3□	3.3	C,S,K	5	6	16	20	6700	0.30	180
HFI-060303-3N6□	3.6	C,S,K	5	6	16	20	6400	0.30	170
HFI-060303-3N9□	3.9	C,S,K	5	7	16	20	6000	0.30	170
HFI-060303-4N3□	4.3	C,S,K	5	7	16	20	5700	0.40	150
HFI-060303-4N7□	4.7	C,S,K	5	7	16	20	5300	0.40	150
HFI-060303-5N1□	5.1	C,S,K	5	7	16	20	5000	0.40	150
HFI-060303-5N6□	5.6	C,S,K	5	7	16	20	4200	0.40	150
HFI-060303-6N2□	6.2	G,J,K	5	7	16	20	3800	0.44	150
HFI-060303-6N8□	6.8	G,J,K	5	7	16	20	3500	0.50	150
HFI-060303-7N5□	7.5	G,J,K	5	7	15	20	3300	0.53	150
HFI-060303-8N2□	8.2	G,J,K	5	7	15	20	3200	0.55	150
HFI-060303-9N1□	9.1	G,J,K	5	6	15	20	3000	0.62	150
HFI-060303-10N□	10	G,J,K	5	7	15	19	2800	0.65	150
HFI-060303-12N□	12	G,J,K	5	7	14	18	2400	0.70	100
HFI-060303-15N□	15	G,J,K	5	7	14	18	2200	0.80	100
HFI-060303-18N□	18	G,J,K	5	7	14	18	2100	0.90	100

■ PRODUCT SPECIFICATIONS

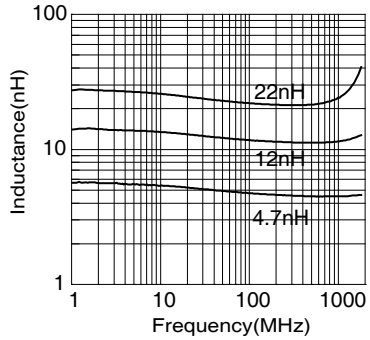
PART NUMBER	Inductance (nH) at 100 MHz	Tolerance	Q Min.	Q Typical			S.R.F.(MHz) Min.	R_{DC} (Ω) Max.	Rated Current (mA) Max.
			100 MHz	100 MHz	500 MHz	800 MHz			
HFI-060303-22N□	2.2	G,J,K	5	7	14	18	1800	1.20	100
HFI-060303-27N□	27	G,J,K	4	6	14	16	1800	1.80	50
HFI-060303-33N□	33	G,J,K	4	6	12	14	1700	2.10	50
HFI-060303-39N□	39	G,J,K	4	6	12	14	1500	2.40	50
HFI-060303-47N□	47	G,J,K	4	6	11	13	1300	2.80	50

■ TYPICAL ELECTRICAL CHARACTERISTIC CURVES

Q vs. Freq. Characteristics



Inductance vs. Freq. Characteristics



PRODUCT SPECIFICATIONS

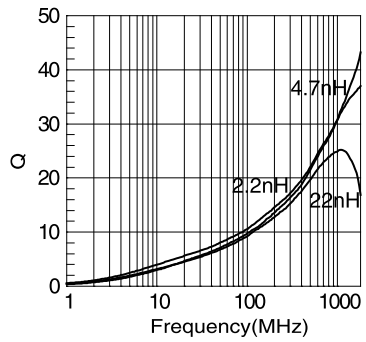
PART NUMBER	INDUCTANCE (nH) AT 100 MHz	Q Min.	Q Typical	S.R.F.(MHz) Min.	R_{DC} (Ω) Max.	I_{DC} (mA) Max.
		100MHz	800 MHz			
HFI-100505-1N0□	1.0	8	43	10000	0.12	300
HFI-100505-1N1□	1.1					
HFI-100505-1N2□	1.2					
HFI-100505-1N3□	1.3				0.13	
HFI-100505-1N5□	1.5			6000		
HFI-100505-1N6□	1.6		41		0.14	
HFI-100505-1N8□	1.8					
HFI-100505-2N0□	2.0		36		0.16	
HFI-100505-2N2□	2.2					
HFI-100505-2N4□	2.4				0.17	
HFI-100505-2N7□	2.7		38			
HFI-100505-3N0□	3.0		37		0.19	
HFI-100505-3N3□	3.3					
HFI-100505-3N6□	3.6		32	5000	0.22	
HFI-100505-3N9□	3.9			4000		
HFI-100505-4N3□	4.3				0.24	
HFI-100505-4N7□	4.7		37			
HFI-100505-5N1□	5.1		35		0.27	
HFI-100505-5N6□	5.6					
HFI-100505-6N2□	6.2		34	3900	0.32	
HFI-100505-6N8□	6.8					
HFI-100505-7N5□	7.5			3700	0.35	
HFI-100505-8N2□	8.2			3500	0.37	
HFI-100505-9N1□	9.1		31	3400	0.40	
HFI-100505-10N□	10.0			3200	0.42	
HFI-100505-12N□	12.0			2600	0.50	
HFI-100505-15N□	15.0		30	2300	0.55	
HFI-100505-18N□	18.0			2000	0.65	
HFI-100505-22N□	22.0			1600	0.80	
HFI-100505-27N□	27.0		28	1400	0.90	
HFI-100505-33N□	33.0		26	1200	1.00	200
HFI-100505-39N□	39.0		24	1100	1.20	
HFI-100505-47N□	47.0		23	900	1.30	

■ PRODUCT SPECIFICATIONS

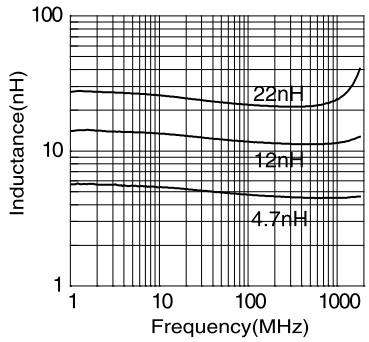
PART NUMBER	Inductance (nH) at 100 MHz	Q Min.	Q Typical	S.R.F.(MHz) Min.	R_{DC} (Ω) Max.	Rated Current (mA) Max.
		100 MHz	800 MHz			
HFI-100505-56N□	56.0	8	21	750	1.40	200
HFI-100505-68N□	68.0		19			180
HFI-100505-82N□	82.0		16	600	1.60	150
HFI-100505-R10□	100.0		-			100
HFI-100505-R12□	120.0		-			

■ TYPICAL ELECTRICAL CHARACTERISTIC CURVES

Q vs. Freq. Characteristics



Inductance vs. Freq. Characteristics

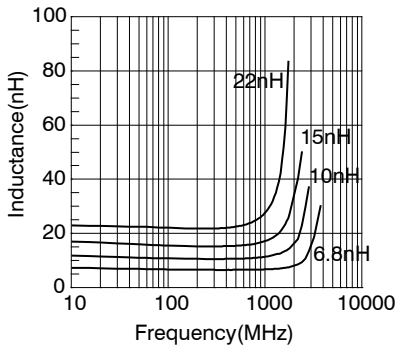


PRODUCT SPECIFICATIONS

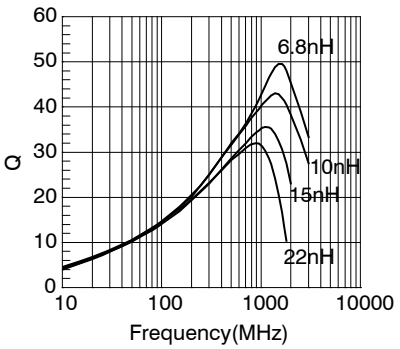
PART NUMBER	INDUCTANCE (nH) AT 100 MHz	Q Min.	Q Typical	S.R.F.(MHz) Min.	R_{DC} (Ω) Max.	I_{DC} (mA) Max.
		100MHz	800 MHz			
HFI-160808-1N0□	1.0	8	47	6000	0.10	1000
HFI-160808-1N2□	1.2					
HFI-160808-1N5□	1.5					
HFI-160808-1N8□	1.8		55			
HFI-160808-2N2□	2.2	10	49			
HFI-160808-2N7□	2.7		48		0.13	
HFI-160808-3N3□	3.3		51			
HFI-160808-3N9□	3.9		48		0.15	
HFI-160808-4N7□	4.7			4000	0.20	
HFI-160808-5N6□	5.6		46		0.23	600
HFI-160808-6N8□	6.8		48		0.25	
HFI-160808-8N2□	8.2		50	3500	0.28	
HFI-160808-10N□	10.0	12	47	3200	0.30	
HFI-160808-12N□	12.0		45	2600	0.35	
HFI-160808-15N□	15.0		48	2300	0.40	
HFI-160808-18N□	18.0		47	2000	0.45	
HFI-160808-22N□	22.0		49	1600	0.50	
HFI-160808-27N□	27.0		47	1400	0.55	
HFI-160808-33N□	33.0		46	1200	0.60	
HFI-160808-39N□	39.0			1100	0.65	500
HFI-160808-47N□	47.0		39	900	0.70	
HFI-160808-56N□	56.0		37		0.75	
HFI-160808-68N□	68.0		36	700	0.85	400
HFI-160808-82N□	82.0		29	600	0.95	300
HFI-160808-R10□	100.0		16		1.0	
HFI-160808-R12□	120.0 at 50MHz	*8	17	500	1.20	
HFI-160808-R15□	150.0 at 50MHz		-			
HFI-160808-R18□	180.0 at 50MHz		-	400	1.30	
HFI-160808-R22□	220.0 at 50MHz		-		1.50	
HFI-160808-R27□	270.0 at 50MHz		-			

TYPICAL ELECTRICAL CHARACTERISTIC CURVES

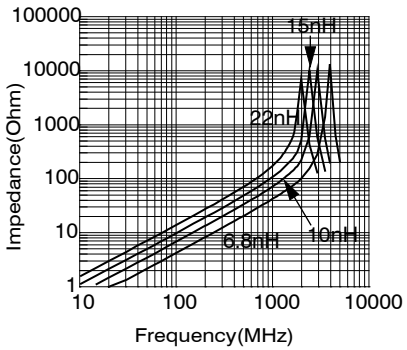
Inductance vs. Freq. Characteristics



Q vs. Freq. Characteristics



Impedance vs. Freq. Characteristics

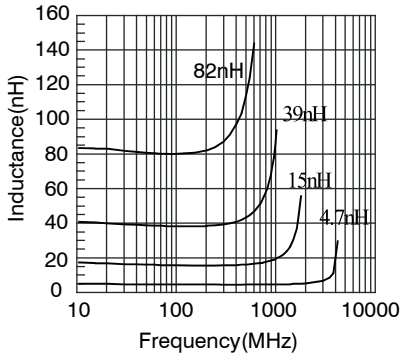


PRODUCT SPECIFICATIONS

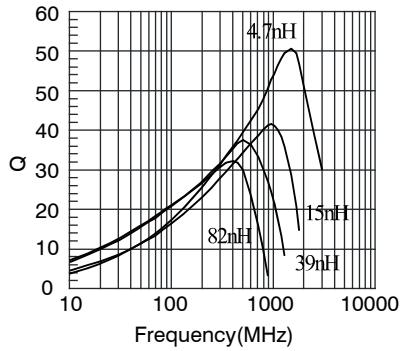
PART NUMBER	INDUCTANCE (nH) AT 100 MHz	Q Min.	Q Typical	S.R.F.(MHz) Min.	R_{DC} (Ω) Max.	I_{DC} (mA) Max.
		100MHz *50MHz	800 MHz			
HFI-201209-1N5□	1.5	10	61	4000	0.10	300
HFI-201209-1N8□	1.8		55			
HFI-201209-2N2□	2.2		53			
HFI-201209-2N7□	2.7	12	56			
HFI-201209-3N3□	3.3		47		0.13	
HFI-201209-3N9□	3.9		54		0.15	
HFI-201209-4N7□	4.7		55	3500	0.20	
HFI-201209-5N6□	5.6	15	60	3200	0.23	
HFI-201209-6N8□	6.8		63	2800	0.25	
HFI-201209-8N2□	8.2			2400	0.28	
HFI-201209-10N□	10.0		60	2100	0.30	
HFI-201209-12N□	12.0			1900	0.35	
HFI-201209-15N□	15.0		63	1600	0.40	
HFI-201209-18N□	18.0			1500	0.45	
HFI-201209-22N□	22.0	18	60	1400	0.50	
HFI-201209-27N□	27.0		58	1300	0.55	
HFI-201209-33N□	33.0		55	1200	0.60	
HFI-201209-39N□	39.0		47	1000	0.65	
HFI-201209-47N□	47.0		43	900	0.70	
HFI-201209-56N□	56.0		39	800	0.75	
HFI-201209-68N□	68.0		30	700	0.80	
HFI-201209-82N□	82.0		-	600	0.90	
HFI-201209-R10□	100.0		-			
HFI-201209-R12□	120.0 at 50 MHz	*13	-	500	0.95	
HFI-201209-R15□	150.0 at 50 MHz		-		1.00	
HFI-201209-R18□	180.0at 50 MHz		-	400	1.10	
HFI-201209-R22□	220.0 at 50 MHz	*12	-	350	1.20	
HFI-201209-R27□	270.0 at 50 MHz		-	300	1.30	
HFI-201209-R33□	330.0 at 50 MHz		-	250	1.40	
HFI-201209-R39□	390.0 at 50 MHz	*10	-		1.30	
HFI-201209-R47□	470.0 at 50 MHz		-	200	1.50	

TYPICAL ELECTRICAL CHARACTERISTIC CURVES

Inductance vs. Freq. Characteristics



Q vs. Freq. Characteristics



Impedance vs. Freq. Characteristics