

Series: HFI

FEATURES:

New 0402 size chips have lead free terminations.

The HFI series is designed for high frequency application up to 6GHz due to its low inductance.

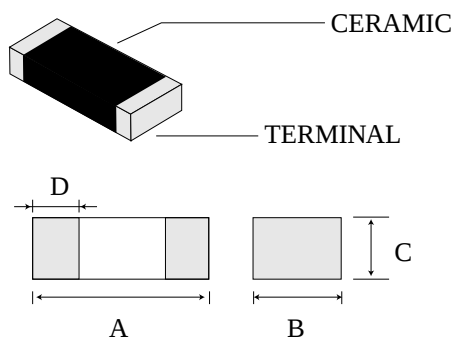
The total of three compact sizes are available (1.6x0.8x0.8 mm, 2.0x1.2x0.9 mm, and 1.0x0.5x0.5 mm) according to inductance requirement (from 1.2nH to 100nH at 100MHz).

For high frequency application including cellular phones, pagers, PDAs, computer communications, etc.

PRODUCT IDENTIFICATION

Product Item Code	Dimension	Inductance	Tolerance: S = $\pm 0.3\text{nH}$, J = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$
HFI	160808	47N	J

PRODUCT DIMENSIONS



Dimensions in mm (inch)

PART NO.	A	B	C	D	
HFI-100505 (0402)	1.00 $\pm$ 0.10 (0.039 $\pm$ 0.004)	0.50 $\pm$ 0.10 (0.020 $\pm$ 0.004)	0.50 $\pm$ 0.10 (0.020 $\pm$ 0.004)	0.25 $\pm$ 0.10 (0.010 $\pm$ 0.004)	
HFI-160808 (0603)	1.6 $\pm$ 0.15 (0.063 $\pm$ 0.006)	0.8 $\pm$ 0.15 (0.031 $\pm$ 0.006)	0.8 $\pm$ 0.15 (0.031 $\pm$ 0.006)	0.3 $\pm$ 0.20 (0.012 $\pm$ 0.008)	
HFI-201209 (0805)	2.0 $\pm$ 0.20 (0.079 $\pm$ 0.008)	1.2 $\pm$ 0.20 (0.047 $\pm$ 0.008)	0.9 $\pm$ 0.20 (0.035 $\pm$ 0.008)	0.5 $\pm$ 0.30 (0.020 $\pm$ 0.012)	

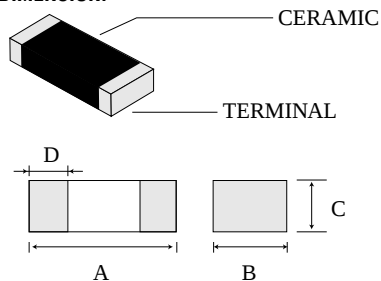


HFI-100505 SERIES

PRODUCT IDENTIFICATION

Product Item Code	Dimension	Inductance	Tolerance: S = $\pm 0.3\text{nH}$, J = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$
HFI	100505	1N0	S

DIMENSION:



A: 1.00 ± 0.10 (0.039 ± 0.004)
 B: 0.50 ± 0.10 (0.020 ± 0.004)
 C: 0.50 ± 0.10 (0.020 ± 0.004)
 D: 0.25 ± 0.10 (0.010 ± 0.004)
 in mm (inch)

Package Quantity: 10,000



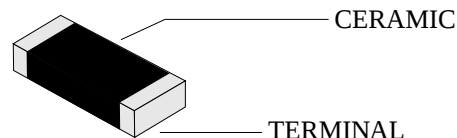
ELECTRICAL CHARACTERISTICS

PART NO	INDUCTANCE (nH) AT 100MHz	Q (TYPICAL)		SELF RESONANT FREQUENCY (MHz) Typ.	DC RESISTANCE R _{DC} (Ω) MAX.	RATED CURRENT I _{DC} (mA) MAX.
		100MHz	800MHz			
HFI-100505-1N0 □	1.0	11	34	>13000	0.12	300
HFI-100505-1N2 □	1.2	11	34	>13000	0.12	300
HFI-100505-1N5 □	1.5	11	34	>13000	0.13	300
HFI-100505-1N8 □	1.8	11	30	11000	0.14	300
HFI-100505-2N2 □	2.2	10	29	10000	0.16	300
HFI-100505-2N7 □	2.7	10	29	9000	0.17	300
HFI-100505-3N3 □	3.3	10	28	8000	0.19	300
HFI-100505-3N9 □	3.9	10	28	7000	0.22	300
HFI-100505-4N7 □	4.7	10	28	6000	0.24	300
HFI-100505-5N6 □	5.6	10	28	5700	0.27	300
HFI-100505-6N8 □	6.8	10	27	5500	0.32	250
HFI-100505-8N2 □	8.2	10	28	4900	0.37	250
HFI-100505-10N □	10	10	30	4300	0.42	250
HFI-100505-12N □	12	10	31	3900	0.50	250
HFI-100505-15N □	15	11	30	3500	0.55	250
HFI-100505-18N □	18	11	30	3100	0.65	200
HFI-100505-22N □	22	11	30	2800	0.80	200
HFI-100505-27N □	27	11	27	2300	0.90	200
HFI-100505-33N □	33	11	25	2100	1.00	200
HFI-100505-39N □	39	11	24	1900	1.20	150
HFI-100505-47N □	47	11	23	1600	1.30	150
HFI-100505-56N □	56	11	21	1300	1.40	150
HFI-100505-68N □	68	11	19	1200	1.40	150
HFI-100505-82N □	82	10	16	1100	1.60	100
HFI-100505-R10 □	100	10	10	1000	1.60	100
HFI-100505-R12 □	120	10	8	800	1.60	100

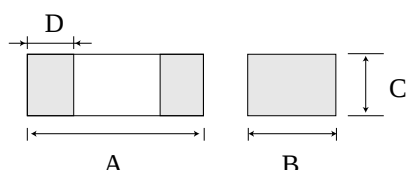
Operating Temperature -25°C to +85°C

HFI-160808 SERIES

DIMENSION:



A: 1.6 ± 0.15 (0.063 $\pm$ 0.006)
 B: 0.8 ± 0.15 (0.031 $\pm$ 0.006)
 C: 0.8 ± 0.15 (0.031 $\pm$ 0.006)
 D: 0.3 ± 0.20 (0.012 $\pm$ 0.008)
 in mm (inch)



ELECTRICAL CHARACTERISTICS

PART NO	INDUCTANCE (nH) AT 100MHz	Q (TYPICAL) MHz		SELF RESONANT FREQUENCY (MHz) MIN. *	DC RESISTANCE R _{DC} (Ω) MAX.	RATED CURRENT I _{DC} (mA) MAX.
		100 *50	800			
HFI-160808-1N2 □	1.2	13	60	13000	0.10	1000
HFI-160808-1N5 □	1.5	13	47	13000	0.10	1000
HFI-160808-1N8 □	1.8	12	30	13000	0.10	1000
HFI-160808-2N2 □	2.2	12	37	12000	0.10	1000
HFI-160808-2N7 □	2.7	12	41	11000	0.10	1000
HFI-160808-3N3 □	3.3	12	42	9000	0.12	1000
HFI-160808-3N9 □	3.9	13	42	8000	0.14	1000
HFI-160808-4N7 □	4.7	12	42	6500	0.16	600
HFI-160808-5N6 □	5.6	12	42	5800	0.18	600
HFI-160808-6N8 □	6.8	12	43	5600	0.22	600
HFI-160808-8N2 □	8.2	13	44	5200	0.24	600
HFI-160808-10N □	10	13	43	4600	0.26	600
HFI-160808-12N □	12	15	45	4000	0.28	600
HFI-160808-15N □	15	15	46	3400	0.32	600
HFI-160808-18N □	18	16	44	3000	0.35	600
HFI-160808-22N □	22	17	44	2900	0.40	600
HFI-160808-27N □	27	17	45	2200	0.45	600
HFI-160808-33N □	33	18	46	1800	0.55	600
HFI-160808-39N □	39	17	44	1600	0.60	500
HFI-160808-47N □	47	17	35	1600	0.70	500
HFI-160808-56N □	56	17	34	1400	0.75	500

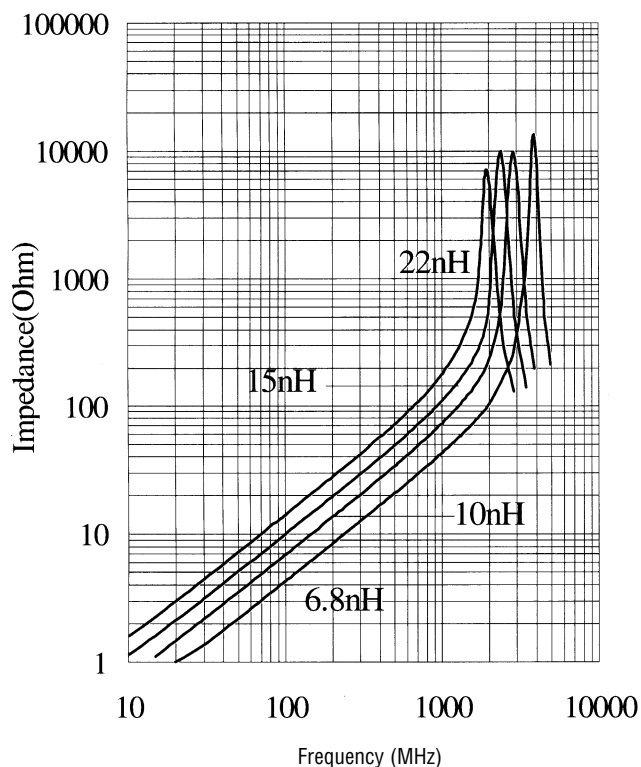
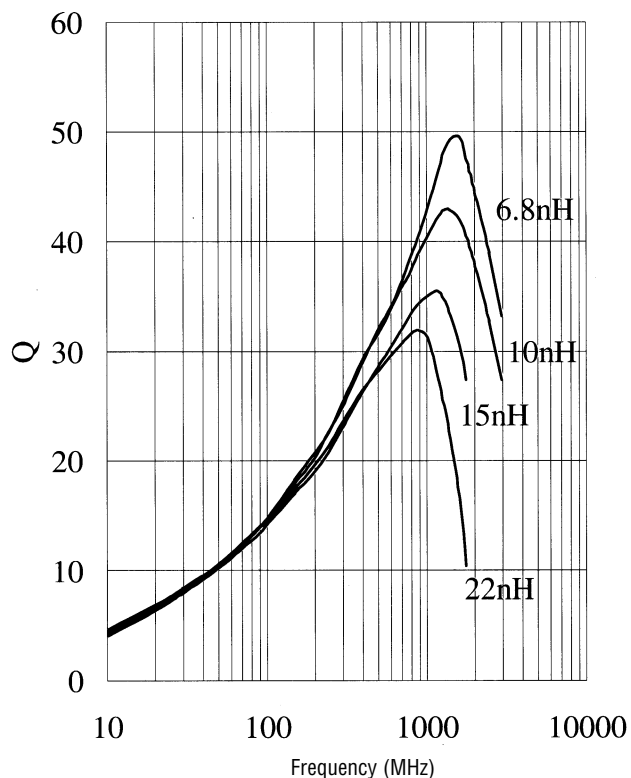
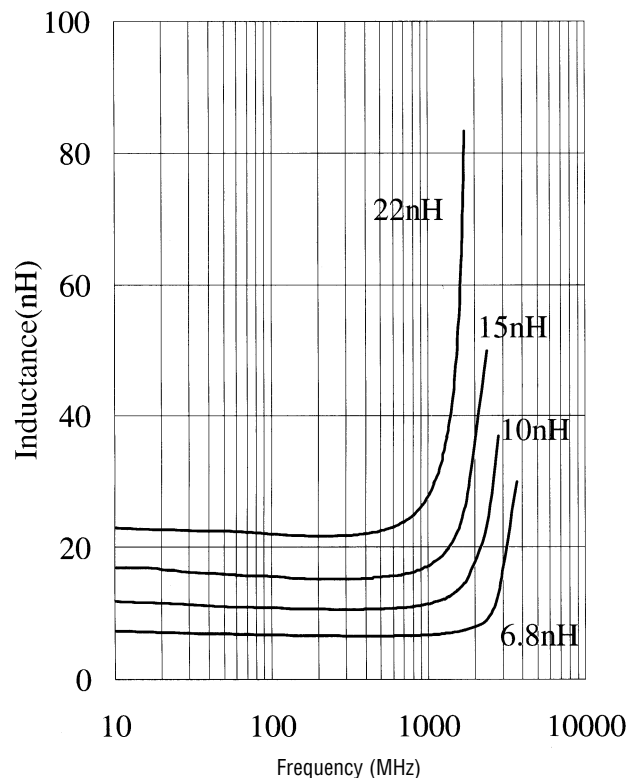
*Measured by HP8753C00

ELECTRICAL CHARACTERISTICS

PART NO	INDUCTANCE (nH) AT 100MHz	Q (TYPICAL) MHz		SELF RESONANT FREQUENCY (MHz) MIN. *	DC RESISTANCE R _{DC} (Ω) MAX.	RATED CURRENT I _{DC} (mA) MAX.
		100	800			
		*50				
HFI-160808-68N □	68	18	30	1200	0.85	300
HFI-160808-82N □	82	18	27	1105	0.95	300
HFI-160808-R10 □	100	18	16	1000	1.00	300
HFI-160808-R12 □	120	*16	-	800	1.20	300
HFI-160808-R15 □	150	*13	-	800	1.20	300
HFI-160808-R18 □	180	*13	-	700	1.30	300
HFI-160808-R22 □	220	*12	-	600	1.50	300

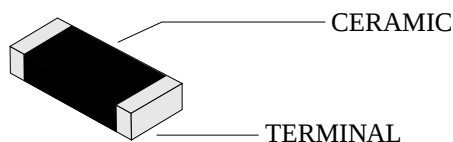
TYPICAL ELECTRICAL CHARACTERISTIC CURVES

TEST INSTRUMENT: HP-4291A

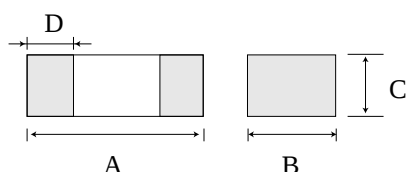


HFI-160808 (HIGH Q) SERIES

DIMENSION:



A: 1.6 ± 0.15 (0.063 $\pm$ 0.006)
B: 0.8 ± 0.15 (0.031 $\pm$ 0.006)
C: 0.8 ± 0.15 (0.031 $\pm$ 0.006)
D: 0.3 ± 0.20 (0.012 $\pm$ 0.008)
in mm (inch)

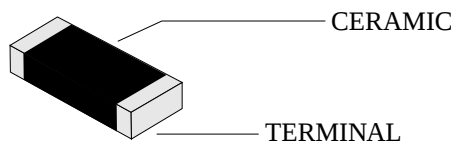


ELECTRICAL CHARACTERISTICS

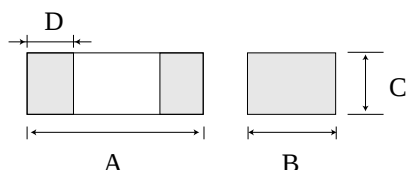
PART NO	INDUCTANCE (nH) AT 100MHz	Q (TYPICAL) MHz		SELF RESONANT FREQUENCY (MHz) MIN. *	DC RESISTANCE R _{dc} (Ω) MAX.	RATED CURRENT I _{dc} (mA) MAX.
		100 *50 **25	800			
HFI-160808-1N2 □ H	1.2	13	45	10000	0.10	1000
HFI-160808-1N5 □ H	1.5	13	45	8000	0.10	1000
HFI-160808-1N8 □ H	1.8	12	40	8000	0.10	1000
HFI-160808-2N2 □ H	2.2	13	45	7200	0.10	1000
HFI-160808-2N7 □ H	2.7	13	45	6200	0.11	1000
HFI-160808-3N3 □ H	3.3	16	53	5350	0.13	1000
HFI-160808-4N7 □ H	4.7	14	43	4750	0.17	600
HFI-160808-5N6 □ H	5.6	15	47	4100	0.20	600
HFI-160808-6N8 □ H	6.8	15	50	3300	0.22	600
HFI-160808-8N2 □ H	8.2	16	52	3300	0.26	600
HFI-160808-10N □ H	10.0	20	56	3000	0.30	600
HFI-160808-12N □ H	12.0	20	57	2500	0.35	600
HFI-160808-15N □ H	15.0	18	53	2500	0.40	600
HFI-160808-18N □ H	18.0	14	40	2350	0.47	600
HFI-160808-22N □ H	22.0	22	56	2050	0.54	600
HFI-160808-27N □ H	27.0	21	54	1900	0.62	600
HFI-160808-33N □ H	33.0	21	53	1750	0.71	600
HFI-160808-39N □ H	39.0	23	51	1450	0.74	500
HFI-160808-47N □ H	47.0	22	40	1250	0.86	500
HFI-160808-56N □ H	56.0	23	44	1200	0.94	500
HFI-160808-68N □ H	68.0	23	38	1100	1.12	400
HFI-160808-82N □ H	82.0	23	—	950	1.75	300
HFI-160808-R10 □ H	100.0	24	—	850	1.97	300
HFI-160808-R12 □ H	120.0	*18	—	850	2.37	250
HFI-160808-R15 □ H	150.0	*19	—	680	2.40	250
HFI-160808-R18 □ H	180.0	*19	—	600	2.70	200
HFI-160808-R22 □ H	220.0	*19	—	500	2.80	200
HFI-160808-R27 □ H	270.0	**15	—	450	3.10	200

HFI-201209 SERIES

DIMENSION:



A: 2.0 ± 0.20 (0.079 ± 0.008)
 B: 1.2 ± 0.20 (0.047 ± 0.008)
 C: 0.9 ± 0.20 (0.035 ± 0.008)
 D: 0.5 ± 0.30 (0.020 ± 0.012)
 in mm (inch)



ELECTRICAL CHARACTERISTICS

PART NO	INDUCTANCE (nH) AT 100MHz	Q (TYPICAL) MHz		SELF RESONANT FREQUENCY (MHz) MIN. *	DC RESISTANCE R_{dc} (Ω) MAX.	RATED CURRENT I_{dc} (mA) MAX.
		100 *25	800			
HFI-201209-1N5 □	1.5	21	61	>6000	0.10	300
HFI-201209-1N8 □	1.8	18	55	>6000	0.10	300
HFI-201209-2N2 □	2.2	18	53	>6000	0.10	300
HFI-201209-2N7 □	2.7	19	56	>6000	0.10	300
HFI-201209-3N3 □	3.3	16	47	>6000	0.13	300
HFI-201209-3N9 □	3.9	18	54	>6000	0.15	300
HFI-201209-4N7 □	4.7	18	55	>6000	0.20	300
HFI-201209-5N6 □	5.6	20	60	5400	0.23	300
HFI-201209-6N8 □	6.8	20	63	4200	0.25	300
HFI-201209-8N2 □	8.2	21	63	3700	0.28	300
HFI-201209-10N □	10	20	60	3100	0.30	300
HFI-201209-12N □	12	21	60	3000	0.35	300
HFI-201209-15N □	15	22	63	2600	0.40	300
HFI-201209-18N □	18	24	63	2300	0.45	300
HFI-201209-22N □	22	23	60	2100	0.50	300
HFI-201209-27N □	27	23	58	1800	0.55	300
HFI-201209-33N □	33	24	55	1700	0.60	300
HFI-201209-39N □	39	23	47	1400	0.65	300
HFI-201209-47N □	47	23	43	1200	0.70	300
HFI-201209-56N □	56	23	39	1100	0.75	300
HFI-201209-68N □	68	25	30	900	0.80	300
HFI-201209-82N □	82	24	-	800	0.90	300
HFI-201209-R10 □	100	23	-	800	0.90	300
HFI-201209-R12 □	120	22	-	700	0.95	300
HFI-201209-R15 □	150	22	-	700	1.00	300
HFI-201209-R18 □	180	23	-	600	1.10	300
HFI-201209-R22 □	220	20	-	550	1.20	300
HFI-201209-R27 □	270	20	-	480	1.30	300
HFI-201209-R33 □	330	22	-	400	1.40	300
HFI-201209-R39 □	390	17	-	400	1.30	300
HFI-201209-R47 □	470	17	-	350	1.50	300
HFI-201209-R56 □	560	*15	-	230	5.00	50
HFI-201209-R68 □	680	*14	-	180	5.50	50

* Measured by HP8753C

TYPICAL ELECTRICAL CHARACTERISTIC CURVES

TEST INSTRUMENT: HP-4291A

