

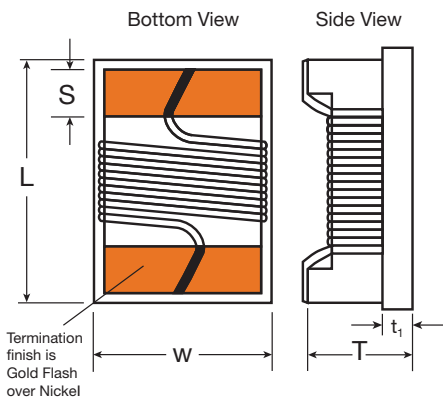
# Miniature RF Chip Inductors

## Features

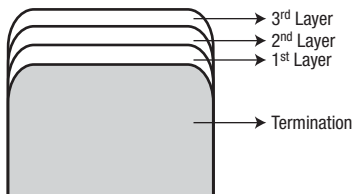
- High Q values
- High SRF
- Wide inductance range, 1nH to 47 $\mu$ H
- Excellent solderability and resistance to soldering heat suitable for flow or reflow soldering
- High reliability and high speed surface mount assembly

## Dimensions

Unit: inch (mm)



SERIES	L	W	T	S	(t <sub>1</sub> )	QTY/REEL
MRFI 0402 (1005)	0.039 ± .004 (1.0 ± 0.10)	0.022 ± .004 (0.55 ± 0.10)	0.020 ± .006 (0.5 ± 0.15)	0.008 ± 0.004 (0.20 ± 0.1)	0.20	10,000
MRFI 0603 (1608)	0.063 ± 0.008 (1.6 ± 0.2)	0.041 ± 0.008 (1.05 ± 0.2)	0.041 ± 0.008 (1.05 ± 0.2)	0.014 ± 0.004 (0.35 ± 0.1)	0.50	3,000
MRFI 0805 (2012)	0.080 ± 0.008 (2.0 ± 0.2)	0.050 ± 0.008 (1.25 ± 0.2)	0.048 ± 0.008 (1.2 ± 0.2)	0.016 ± 0.004 (0.4 ± 0.1)	0.60	2,000
MRFI 1008 (2520)	0.098 ± 0.008 (2.6 ± 0.2)	0.080 ± 0.008 (2.1 ± 0.2)	0.063 ± 0.008 (1.6 ± 0.2)	0.020 ± 0.004 (0.5 ± 0.1)	0.70	2,000
MRFI 1210 (3225)	0.126 ± .008 (3.2 ± 0.2)	0.102 ± .008 (2.6 ± 0.2)	0.087 ± 0.008 (2.2 ± 0.2)	0.020 ± 0.004 (0.5 ± 0.1)	1.10	2,000



	Ceramic Type	Ferrite Type
a) 1 <sup>st</sup> Layer	Mo/Mn or Pd/Ag	Pd/Ag
b) 2 <sup>nd</sup> Layer	Ni	Ni
c) 3 <sup>rd</sup> Layer	Au	Sn

## How To Order

**MRFI0603**

Series

**- 4N7**

Inductance Value  
 4N7: 4.7nH  
 47N: 47nH  
 R47: 470nH  
 4R7: 4.7 $\mu$ H  
 470: 47 $\mu$ H

**S**

Tolerance  
 B: ± 0.2nH  
 S: ± 0.3nH  
 G: ± 2%  
 J: ± 5%  
 K: ± 10%  
 M: ± 20%

**T**

Packaging  
 T: Tape  
 Termination finish is Gold Flash over Nickel

NOTE: Core composition is either Ceramic or Ferrite depending on size and value. See note on the bottom of each data sheet.

**Please Note: Venkel offers Engineering Kits for this product. See page 120 for details.**

All components in this section are RoHS compliant per the EU directives and definitions.

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## MRFI 0402 SERIES (1005) - Electrical Characteristics

Part Number	Inductance (nH)	Tolerance	Q		S.R.F. Min. (MHz)	R <sub>dc</sub> Max (Ω)	I <sub>dc</sub> Max (mA)	Color Coding**
			Min.	Typical @ 900MHz				
MRFI 0402 – 1N0 □ T	1.0 @ 250 MHz	B, S	13	26	6,000	0.045	1360	N/A
MRFI 0402 – 1N9 □ T	1.9 @ 250 MHz	B, S	16	29	6,000	0.070	1040	N/A
MRFI 0402 – 2N0 □ T	2.0 @ 250 MHz	B, S	16	30	6,000	0.070	1040	N/A
MRFI 0402 – 2N2 □ T	2.2 @ 250 MHz	B, S	18	32	6,000	0.070	960	N/A
MRFI 0402 – 2N4 □ T	2.4 @ 250 MHz	B, S	16	35	6,000	0.068	790	N/A
MRFI 0402 – 2N7 □ T	2.7 @ 250 MHz	B, S	16	31	6,000	0.120	640	N/A
MRFI 0402 – 3N3 □ T	3.3 @ 250 MHz	K, J, B	20	41	6,000	0.066	840	N/A
MRFI 0402 – 3N6 □ T	3.6 @ 250 MHz	K, J, B	20	43	6,000	0.066	840	N/A
MRFI 0402 – 3N9 □ T	3.9 @ 250 MHz	K, J, B	20	41	5,800	0.066	840	N/A
MRFI 0402 – 4N3 □ T	4.3 @ 250 MHz	K, J, B	18	45	6,000	0.091	700	N/A
MRFI 0402 – 4N7 □ T	4.7 @ 250 MHz	K, J, B	15	45	4,775	0.130	640	N/A
MRFI 0402 – 5N1 □ T	5.1 @ 250 MHz	K, J, B	23	49	5,800	0.083	800	N/A
MRFI 0402 – 5N6 □ T	5.6 @ 250 MHz	K, J, B	23	46	5,800	0.083	760	N/A
MRFI 0402 – 6N2 □ T	6.2 @ 250 MHz	K, J, B	23	49	5,800	0.083	760	N/A
MRFI 0402 – 6N8 □ T	6.8 @ 250 MHz	K, J, B	20	50	4,800	0.083	680	N/A
MRFI 0402 – 7N5 □ T	7.5 @ 250 MHz	K, J, B	25	50	5,800	0.104	680	N/A
MRFI 0402 – 8N2 □ T	8.2 @ 250 MHz	K, J, B	25	49	4,400	0.104	680	N/A
MRFI 0402 – 8N7 □ T	8.7 @ 250 MHz	K, J, B	18	50	4,100	0.200	480	N/A
MRFI 0402 – 9N0 □ T	9.0 @ 250 MHz	K, J, B	25	49	4,160	0.104	680	N/A
MRFI 0402 – 9N5 □ T	9.5 @ 250 MHz	K, J, B	18	45	4,000	0.200	680	N/A
MRFI 0402 – 10N □ T	10 @ 250 MHz	K, J, G	23	47	3,900	0.195	480	N/A
MRFI 0402 – 11N □ T	11 @ 250 MHz	K, J, G	26	56	3,680	0.120	640	N/A
MRFI 0402 – 12N □ T	12 @ 250 MHz	K, J, G	26	51	3,600	0.120	640	N/A
MRFI 0402 – 13N □ T	13 @ 250 MHz	K, J, G	24	54	3,450	0.210	560	N/A
MRFI 0402 – 15N □ T	15 @ 250 MHz	K, J, G	26	54	3,280	0.172	560	N/A
MRFI 0402 – 16N □ T	16 @ 250 MHz	K, J, G	24	54	3,100	0.220	560	N/A
MRFI 0402 – 18N □ T	18 @ 250 MHz	K, J, G	25	52	3,100	0.230	420	N/A
MRFI 0402 – 19N □ T	19 @ 250 MHz	K, J, G	26	50	3,040	0.202	480	N/A
MRFI 0402 – 20N □ T	20 @ 250 MHz	K, J, G	25	51	3,000	0.250	420	N/A
MRFI 0402 – 22N □ T	22 @ 250 MHz	K, J, G	25	52	2,800	0.300	400	N/A
MRFI 0402 – 23N □ T	23 @ 250 MHz	K, J, G	26	53	2,720	0.214	400	N/A
MRFI 0402 – 24N □ T	24 @ 250 MHz	K, J, G	25	51	2,700	0.300	400	N/A
MRFI 0402 – 27N □ T	27 @ 250 MHz	K, J, G	26	48	2,480	0.298	400	N/A
MRFI 0402 – 30N □ T	30 @ 250 MHz	K, J, G	25	46	2,350	0.300	400	N/A
MRFI 0402 – 33N □ T	33 @ 250 MHz	K, J, G	24	48	2,350	0.350	400	N/A
MRFI 0402 – 36N □ T	36 @ 250 MHz	K, J, G	26	48	2,320	0.403	320	N/A
MRFI 0402 – 39N □ T	39 @ 250 MHz	K, J, G	25	45	2,100	0.550	320	N/A
MRFI 0402 – 40N □ T	40 @ 250 MHz	K, J, G	26	48	2,240	0.438	320	N/A
MRFI 0402 – 43N □ T	43 @ 250 MHz	K, J, G	25	46	2,030	0.810	100	N/A
MRFI 0402 – 47N □ T	47 @ 200 MHz	K, J, G	26	46	2,100	0.830	150	N/A
MRFI 0402 – 51N □ T	51 @ 200 MHz	K, J	25	40	1,750	0.820	100	N/A
MRFI 0402 – 56N □ T	56 @ 200 MHz	K, J	22	42	1,760	0.970	100	N/A
MRFI 0402 – 68N □ T	68 @ 200 MHz	K, J	22	36	1,620	1.120	100	N/A
MRFI 0402 – 82N □ T	82 @ 150 MHz	K, J	20	33	1,500	1.250	100	N/A
MRFI 0402 – R10 □ T	100 @ 150 MHz	K, J	20	30	1,300	2.520	100	N/A

NOTE: All 0402's have Ceramic core.

Note: \* For values not listed, please consult your salesperson.

- NOTE**
- Inductance: HP-4287A RF LCR meter with HP-16193 fixture
  - Q: HP-4287A RF LCR meter with HP-16193 fixture
  - S.R.F (Self-resonance Frequency) ENA E5071B network analyzer
  - R<sub>dc</sub> (DC Resistance): HP-4338B milliohmeter
  - I<sub>dc</sub> (Allowable Current)
  - □ (Inductance Tolerance) (B = ±0.2nH, S = ±0.3nH, G = ±2% J = ±5%, K = ±10%, M = ±20%)
  - \*\* Color code or marking is not applicable for this series



# Miniature RF Chip Inductors

## MRFI 0603 SERIES (1608) - Electrical Characteristics

Part Number	Inductance (nH)	Tolerance	Q		S.R.F. Min. (MHz)	R <sub>dc</sub> Max (Ω)	I <sub>dc</sub> Max (mA)	Color Coding**
			Min.	Typical @ 900MHz				
MRFI 0603 – 1N6 □ T	1.6 @ 250 MHz	B, S	24	40	12,500	0.030	700	N/A
MRFI 0603 – 1N8 □ T	1.8 @ 250 MHz	B, S	16	35	12,500	0.045	700	N/A
MRFI 0603 – 2N0 □ T	2.0 @ 250 MHz	B, S	16	31	6,900	0.080	700	N/A
MRFI 0603 – 3N9 □ T	3.9 @ 250 MHz	B, S	22	51	6,900	0.080	700	N/A
MRFI 0603 – 4N3 □ T	4.3 @ 250 MHz	B, S	22	45	5,900	0.080	700	N/A
MRFI 0603 – 4N7 □ T	4.7 @ 250 MHz	B, S	20	47	5,800	0.130	700	N/A
MRFI 0603 – 5N1 □ T	5.1 @ 250 MHz	K, J	20	47	5,700	0.140	700	N/A
MRFI 0603 – 5N6 □ T	5.6 @ 250 MHz	K, J	16	40	5,500	0.150	700	N/A
MRFI 0603 – 6N8 □ T	6.8 @ 250 MHz	K, J, B	30	63	5,800	0.110	700	N/A
MRFI 0603 – 7N5 □ T	7.5 @ 250 MHz	K, J, B	28	64	4,800	0.106	700	N/A
MRFI 0603 – 8N2 □ T	8.2 @ 250 MHz	K, J, B	30	72	4,600	0.100	700	N/A
MRFI 0603 – 8N7 □ T	8.7 @ 250 MHz	K, J, B	28	66	4,600	0.109	700	N/A
MRFI 0603 – 9N1 □ T	9.1 @ 250 MHz	K, J	28	60	4,000	0.135	700	N/A
MRFI 0603 – 10N □ T	10 @ 250 MHz	K, J, G	30	66	3,800	0.130	700	N/A
MRFI 0603 – 12N □ T	12 @ 250 MHz	K, J, G	35	72	4,000	0.130	700	N/A
MRFI 0603 – 15N □ T	15 @ 250 MHz	K, J, G	35	68	4,000	0.170	700	N/A
MRFI 0603 – 18N □ T	18 @ 250 MHz	K, J, G	38	77	3,100	0.170	700	N/A
MRFI 0603 – 20N □ T	20 @ 250 MHz	K, J	38	72	3,000	0.220	700	N/A
MRFI 0603 – 22N □ T	22 @ 250 MHz	K, J, G	38	70	3,000	0.220	700	N/A
MRFI 0603 – 24N □ T	24 @ 250 MHz	K, J	37	75	2,650	0.135	700	N/A
MRFI 0603 – 27N □ T	27 @ 250 MHz	K, J, G	40	75	2,800	0.220	600	N/A
MRFI 0603 – 30N □ T	30 @ 250 MHz	K, J	45	57	2,300	0.220	600	N/A
MRFI 0603 – 33N □ T	33 @ 250 MHz	K, J, G	43	78	2,300	0.220	600	N/A
MRFI 0603 – 36N □ T	36 @ 250 MHz	K, J	43	70	2,200	0.250	600	N/A
MRFI 0603 – 39N □ T	39 @ 250 MHz	K, J, G	43	66	2,200	0.250	600	N/A
MRFI 0603 – 43N □ T	43 @ 250 MHz	K, J	38	62	2,000	0.280	600	N/A
MRFI 0603 – 47N □ T	47 @ 200 MHz	K, J, G	40	65	2,000	0.280	600	N/A
MRFI 0603 – 51N □ T	51 @ 200 MHz	K, J	40	66	1,900	0.310	600	N/A
MRFI 0603 – 56N □ T	56 @ 200 MHz	K, J, G	40	66	1,900	0.310	600	N/A
MRFI 0603 – 62N □ T	62 @ 200 MHz	K, J	40	60	1,700	0.340	600	N/A
MRFI 0603 – 68N □ T	68 @ 200 MHz	K, J, G	40	57	1,700	0.340	600	N/A
MRFI 0603 – 72N □ T	72 @ 150 MHz	K, J, G	35	60	1,700	0.490	400	N/A
MRFI 0603 – 82N □ T	82 @ 150 MHz	K, J, G	35	58	1,700	0.540	400	N/A
MRFI 0603 – R10 □ T	100 @ 150 MHz	K, J, G	35	51	1,400	0.630	400	N/A
MRFI 0603 – R12 □ T	120 @ 150 MHz	K, J, G	35	45	1,300	0.650	300	N/A
MRFI 0603 – R13 □ T	130 @ 150 MHz	K, J	35	40	1,000	0.920	280	N/A
MRFI 0603 – R15 □ T	150 @ 150 MHz	K, J, G	35	33	1,000	0.920	280	N/A
MRFI 0603 – R18 □ T	180 @ 100MHz	K, J, G	30	26	1,000	1.250	240	N/A
MRFI 0603 – R20 □ T	200 @ 100 MHz	K, J	30	23	1,000	1.250	240	N/A
MRFI 0603 – R21 □ T	210 @ 100 MHz	K, J	27	23	1,000	1.700	200	N/A
MRFI 0603 – R22 □ T	220 @ 100 MHz	K, J, G	30	23	1,000	1.700	200	N/A
MRFI 0603 – R24 □ T	240 @ 100 MHz	K, J	30	15	1,000	1.700	200	N/A
MRFI 0603 – R27 □ T	270 @ 100 MHz	K, J, G	30	10	1,000	1.800	170	N/A
MRFI 0603 – R33 □ T	330 @ 100 MHz	K, J	25	–	450	2.000	150	N/A
MRFI 0603 – R39 □ T	390 @ 100 MHz	K, J	20	–	350	2.000	170	N/A

NOTE: All 0603's have Ceramic core.

Note: \* For values not listed, please consult your salesperson.

- NOTE**
- Inductance: HP-4287A RF LCR meter with HP-16193 fixture
  - Q: HP-4287A RF LCR meter with HP-16193 fixture
  - S.R.F (Self-resonance Frequency) ENA E5071B network analyzer
  - R<sub>dc</sub> (DC Resistance): HP-4338B milliohmmeter
  - I<sub>dc</sub> (Allowable Current)
  - □ (Inductance Tolerance) (B = ±0.2nH, S = ±0.3nH, G = ±2% J = ±5%, K = ±10%, M = ±20%)
  - \*\* Color code or marking is not applicable for this series

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## MRFI 0805 SERIES (2012) - Electrical Characteristics

Part Number	Inductance (nH)	Tolerance	Q Min.	S.R.F. Min. (MHz)	Rdc Max (Ω)	Ibc Max (mA)	Color Coding**
MRFI 0805 – 2N2 □T	2.2 @ 250 MHz	B, S	50 @ 1000 MHz	6,000	0.06	800	Gray
MRFI 0805 – 2N7 □T	2.7 @ 250 MHz	B, S	35 @ 1000 MHz	6,000	0.08	800	Brown
MRFI 0805 – 3N3 □T	3.3 @ 250 MHz	B, S	60 @ 1000 MHz	6,000	0.08	800	Black
MRFI 0805 – 3N9 □T	3.9 @ 250 MHz	B, S	60 @ 1000 MHz	6,000	0.06	600	Red
MRFI 0805 – 4N7 □T	4.7 @ 250 MHz	B, S	60 @ 1000 MHz	5,800	0.06	600	Yellow
MRFI 0805 – 5N1 □T	5.1 @ 250 MHz	K, J, B	60 @ 1000 MHz	5,800	0.08	600	Blue
MRFI 0805 – 5N6 □T	5.6 @ 250 MHz	K, J, B	60 @ 1000 MHz	5,800	0.08	600	Orange
MRFI 0805 – 6N8 □T	6.8 @ 250 MHz	K, J, B	60 @ 1000 MHz	5,500	0.06	600	Brown
MRFI 0805 – 8N2 □T	8.2 @ 250 MHz	K, J, B	60 @ 1000 MHz	5,500	0.06	600	Red
MRFI 0805 – 10N □T	10 @ 250 MHz	K, J, G	60 @ 500 MHz	4,800	0.08	600	Blue
MRFI 0805 – 12N □T	12 @ 250 MHz	K, J, G	60 @ 500 MHz	4,100	0.08	600	Orange
MRFI 0805 – 15N □T	15 @ 250 MHz	K, J, G	60 @ 500 MHz	3,600	0.08	600	Yellow
MRFI 0805 – 18N □T	18 @ 250 MHz	K, J, G	60 @ 500 MHz	3,400	0.08	600	Green
MRFI 0805 – 22N □T	22 @ 250 MHz	K, J, G	60 @ 500 MHz	3,300	0.10	600	Blue
MRFI 0805 – 27N □T	27 @ 250 MHz	K, J, G	60 @ 500 MHz	2,600	0.12	600	Violet
MRFI 0805 – 33N □T	33 @ 250 MHz	K, J, G	60 @ 500 MHz	2,400	0.15	500	Gray
MRFI 0805 – 39N □T	39 @ 250 MHz	K, J, G	60 @ 500 MHz	2,100	0.18	500	White
MRFI 0805 – 47N □T	47 @ 200 MHz	K, J, G	60 @ 500 MHz	1,700	0.15	500	Black
MRFI 0805 – 56N □T	56 @ 200 MHz	K, J, G	60 @ 500 MHz	1,600	0.25	500	Brown
MRFI 0805 – 68N □T	68 @ 200 MHz	K, J, G	60 @ 500 MHz	1,450	0.27	500	Red
MRFI 0805 – 82N □T	82 @ 150 MHz	K, J, G	60 @ 500 MHz	1,350	0.32	500	Orange
MRFI 0805 – R10 □T	100 @ 150 MHz	K, J, G	60 @ 500 MHz	1,200	0.43	500	Yellow
MRFI 0805 – R12 □T	120 @ 150 MHz	K, J, G	50 @ 250 MHz	1,100	0.48	500	Green
MRFI 0805 – R15 □T	150 @ 100 MHz	K, J, G	50 @ 250 MHz	950	0.56	400	Blue
MRFI 0805 – R18 □T	180 @ 100 MHz	K, J, G	50 @ 250 MHz	900	0.78	400	Violet
MRFI 0805 – R22 □T	220 @ 100 MHz	K, J, G	50 @ 250 MHz	860	1.00	400	Gray
MRFI 0805 – R27 □T	270 @ 100 MHz	K, J, G	45 @ 250 MHz	850	1.46	350	White
MRFI 0805 – R33 □T	330 @ 100 MHz	K, J, G	45 @ 250 MHz	800	1.65	300	Black
MRFI 0805 – R39 □T	390 @ 100 MHz	K, J, G	45 @ 250 MHz	780	2.20	210	Brown
*MRFI 0805 – R47 □T	470 @ 25 MHz	K, J	45 @ 100 MHz	375	0.95	500	Red
*MRFI 0805 – R56 □T	560 @ 25 MHz	K, J	45 @ 100 MHz	340	1.10	450	Green
*MRFI 0805 – R68 □T	680 @ 25 MHz	K, J	35 @ 100 MHz	188	1.20	400	Orange
*MRFI 0805 – R82 □T	820 @ 25 MHz	K, J	35 @ 100 MHz	215	1.50	300	Gray
*MRFI 0805 – 1R0 □T	1000 @ 25 MHz	K, J	35 @ 50 MHz	200	2.13	180	Yellow
*MRFI 0805 – 1R2 □T	1200 @ 7.96 MHz	K, J	15 @ 7.96 MHz	200	2.38	150	Brown
*MRFI 0805 – 1R5 □T	1500 @ 7.96 MHz	K, J	15 @ 7.96 MHz	200	2.90	130	Green
*MRFI 0805 – 1R8 □T	1800 @ 7.96 MHz	K, J	15 @ 7.96 MHz	120	3.00	120	Blue
*MRFI 0805 – 2R2 □T	2200 @ 7.96 MHz	K, J	15 @ 7.96 MHz	110	3.10	110	Brown
*MRFI 0805 – 2R7 □T	2700 @ 7.96 MHz	K, J	15 @ 7.96 MHz	100	3.50	100	Violet
*MRFI 0805 – 3R3 □T	3300 @ 7.96 MHz	K, J	15 @ 7.96 MHz	70	2.30	210	Gray
*MRFI 0805 – 3R9 □T	3900 @ 7.96 MHz	K, J	15 @ 7.96 MHz	60	2.50	200	White
*MRFI 0805 – 4R7 □T	4700 @ 7.96 MHz	K, J	15 @ 7.96 MHz	50	2.80	180	Black
*MRFI 0805 – 5R6 □T	5600 @ 7.96 MHz	K, J	15 @ 7.96 MHz	45	3.00	160	Red
*MRFI 0805 – 6R8 □T	6800 @ 7.96 MHz	K, J	15 @ 7.96 MHz	45	3.20	130	Brown
*MRFI 0805 – 8R2 □T	8200 @ 7.96 MHz	K, J	15 @ 7.96 MHz	40	3.50	120	Red
*MRFI 0805 – 100 □T	10000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	40	5.00	80	Orange

NOTE: All values, 390nH and lower have a Ceramic core with Gold plating.

Note: \* For values not listed, please consult your salesperson.

\* All values higher than 390nH have a Ferrite core with Lead Free solder plating.

- NOTE**
- L, Q; HP-4287A at 100MHz (Test fixture: HP-16193)
  - S.R.F: Self-resonance Frequency; ENA E5071B network analyzer
  - Rdc: DC Resistance; HP-4338B
  - Ibc: Allowable Current
  - □ Inductance Tolerance (B = ±0.2nH, S = ±0.3nH, G = ±2% J = ±5%, K = ±10%, M = ±20%)
  - \*\* A color dot is put on these components for internal lot identification purposes

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VENKEL LTD.

# Miniature RF Chip Inductors

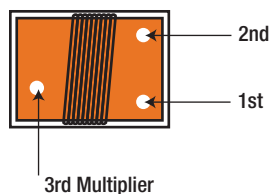
## MRFI 1008 SERIES (2520) - Electrical Characteristics

Part Number	Inductance (nH)	Tolerance	Q Min.	S.R.F. Min. (MHz)	Rdc Max ( $\Omega$ )	Ibc Max (mA)	Color Coding		
							1st	2nd	3rd
MRFI 1008 - 3N3 □	3.3 @ 100 MHz	B, S	50 @ 1000 MHz	6,000	0.06	1000	Black	Orange	Orange
MRFI 1008 - 6N8 □	6.8 @ 100 MHz	K, J, B	50 @ 1000 MHz	5,500	0.06	1000	Black	Blue	Gray
MRFI 1008 - 8N2 □	8.2 @ 100 MHz	K, J, B	50 @ 1000 MHz	5,500	0.06	1000	Black	Gray	Red
MRFI 1008 - 10N □	10 @ 100 MHz	K, J, G	50 @ 1000 MHz	4,300	0.08	1000	Brown	Black	Black
MRFI 1008 - 12N □	12 @ 100 MHz	K, J, G	60 @ 500 MHz	3,600	0.08	1000	Brown	Red	Black
MRFI 1008 - 15N □	15 @ 100 MHz	K, J, G	60 @ 500 MHz	2,700	0.08	1000	Brown	Green	Black
MRFI 1008 - 18N □	18 @ 100 MHz	K, J, G	60 @ 350 MHz	2,700	0.10	1000	Brown	Gray	Black
MRFI 1008 - 22N □	22 @ 100 MHz	K, J, G	60 @ 350 MHz	2,500	0.10	1000	Red	Red	Black
MRFI 1008 - 27N □	27 @ 100 MHz	K, J, G	60 @ 350 MHz	1,800	0.10	1000	Red	Violet	Black
MRFI 1008 - 33N □	33 @ 100 MHz	K, J, G	60 @ 350 MHz	1,700	0.10	1000	Orange	Orange	Black
MRFI 1008 - 39N □	39 @ 100 MHz	K, J, G	60 @ 350 MHz	1,500	0.10	1000	Orange	White	Black
MRFI 1008 - 47N □	47 @ 100 MHz	K, J, G	60 @ 350 MHz	1,500	0.10	1000	Yellow	Violet	Black
MRFI 1008 - 56N □	56 @ 100 MHz	K, J, G	60 @ 350 MHz	1,350	0.12	1000	Green	Blue	Black
MRFI 1008 - 68N □	68 @ 100 MHz	K, J, G	60 @ 350 MHz	1,300	0.15	1000	Blue	Gray	Black
MRFI 1008 - 82N □	82 @ 100 MHz	K, J, G	60 @ 350 MHz	1,100	0.18	1000	Gray	Red	Black
MRFI 1008 - R10 □	100 @ 100 MHz	K, J, G	60 @ 350 MHz	1,100	0.18	1000	Brown	Black	Brown
MRFI 1008 - R12 □	120 @ 25 MHz	K, J, G	45 @ 100 MHz	950	0.20	800	Brown	Red	Brown
MRFI 1008 - R15 □	150 @ 25 MHz	K, J, G	45 @ 100 MHz	880	0.22	800	Brown	Green	Brown
MRFI 1008 - R18 □	180 @ 25 MHz	K, J, G	45 @ 100 MHz	800	0.33	800	Brown	Gray	Brown
MRFI 1008 - R22 □	220 @ 25 MHz	K, J, G	45 @ 100 MHz	730	0.45	800	Red	Red	Brown
MRFI 1008 - R27 □	270 @ 25 MHz	K, J, G	45 @ 100 MHz	650	0.75	600	Red	Violet	Brown
MRFI 1008 - R33 □	330 @ 25 MHz	K, J, G	45 @ 100 MHz	570	0.90	500	Orange	Orange	Brown
MRFI 1008 - R39 □	390 @ 25 MHz	K, J, G	45 @ 100 MHz	530	1.06	470	Orange	White	Brown
MRFI 1008 - R47 □	470 @ 25 MHz	K, J, G	45 @ 100 MHz	480	1.17	420	Yellow	Violet	Brown
MRFI 1008 - R56 □	560 @ 25 MHz	K, J, G	45 @ 100 MHz	430	1.50	310	Green	Blue	Brown
MRFI 1008 - R68 □	680 @ 25 MHz	K, J, G	45 @ 100 MHz	380	2.06	230	Blue	Gray	Brown
MRFI 1008 - R75 □	750 @ 25 MHz	K, J, G	45 @ 100 MHz	360	2.20	200	Violet	Green	Brown
MRFI 1008 - R82 □	820 @ 25 MHz	K, J, G	45 @ 100 MHz	350	2.30	180	Gray	Red	Brown
MRFI 1008 - R91 □	910 @ 25 MHz	K, J, G	45 @ 100 MHz	330	3.18	150	White	Brown	Brown
MRFI 1008 - 1R0 □	1000 @ 25 MHz	K, J, G	35 @ 50 MHz	310	3.30	120	Brown	Black	Red

NOTE: All values 1000nH (1.0 uH) and lower have a Ceramic core with Gold plating.

Note: \* For values not listed, please consult your salesperson.

- NOTE**
- Inductance: HP-4287A RF LCR meter with HP-16193 fixture
  - Q: HP-4287A RF LCR meter with HP-16193 fixture
  - S.R.F (Self-resonance Frequency) ENA E5071B network analyzer
  - Rdc (DC Resistance): HP-4338B milliohmmeter
  - Ibc (Allowable Current)
  - □ (Inductance Tolerance) (B =  $\pm 0.2\text{nH}$ , S =  $\pm 0.3\text{nH}$ , G =  $\pm 2\%$  J =  $\pm 5\%$ , K =  $\pm 10\%$ , M =  $\pm 20\%$ )



These parts are marked with 3 color dots. The table above shows the significance of each color. Dots 1 and 2 indicate the inductance in nanoHenries. Dot 3 indicates the number of zeros to be added.

**Examples:**

Gray Red Black = 82nH  
 Brown Red Brown = 120 nH  
 Yellow Violet Red = 4700nH

**Values below 10nH**

On these parts, the third dot is not a multiplier. Refer to the table above for specific inductance values.

MRFI 1008 Series  
 Black Gray Red = 8.2nH



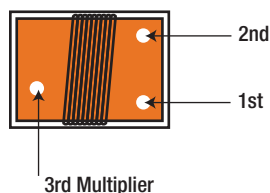
## MRFI 1008 SERIES (2520) - Electrical Characteristics

Part Number	Inductance (nH)	Tolerance	Q Min.	S.R.F. Min. (MHz)	Rbc Max ( $\Omega$ )	Ibc Max (mA)	Color Coding		
							1st	2nd	3rd
*MRFI 1008 – 1R2 □T	1200 @ 7.96 MHz	K, J	20 @ 7.96 MHz	280	1.30	230	Brown	Red	Red
*MRFI 1008 – 1R5 □T	1500 @ 7.96 MHz	K, J	20 @ 7.96 MHz	250	1.65	220	Brown	Green	Red
*MRFI 1008 – 1R8 □T	1800 @ 7.96 MHz	K, J	20 @ 7.96 MHz	200	2.20	210	Brown	Gray	Red
*MRFI 1008 – 2R2 □T	2200 @ 7.96 MHz	K, J	20 @ 7.96 MHz	160	2.35	200	Red	Red	Red
*MRFI 1008 – 2R7 □T	2700 @ 7.96 MHz	K, J	20 @ 7.96 MHz	130	2.60	195	Red	Violet	Red
*MRFI 1008 – 3R3 □T	3300 @ 7.96 MHz	K, J	20 @ 7.96 MHz	80	2.85	185	Orange	Orange	Red
*MRFI 1008 – 3R9 □T	3900 @ 7.96 MHz	K, J	20 @ 7.96 MHz	50	4.00	180	Orange	White	Red
*MRFI 1008 – 4R7 □T	4700 @ 7.96 MHz	K, J	20 @ 7.96 MHz	45	4.30	175	Yellow	Violet	Red
*MRFI 1008 – 5R6 □T	5600 @ 7.96 MHz	K, J	20 @ 7.96 MHz	42	2.60	170	Green	Blue	Red
*MRFI 1008 – 6R8 □T	6800 @ 7.96 MHz	K, J	20 @ 7.96 MHz	39	2.80	165	Blue	Gray	Red
*MRFI 1008 – 8R2 □T	8200 @ 7.96 MHz	K, J	20 @ 7.96 MHz	36	3.05	160	Gray	Red	Red
*MRFI 1008 – 100 □T	10000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	33	3.50	150	Brown	Black	Orange
*MRFI 1008 – 120 □T	12000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	30	3.60	140	Brown	Red	Orange
*MRFI 1008 – 150 □T	15000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	26	4.00	130	Brown	Green	Orange
*MRFI 1008 – 180 □T	18000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	24	4.50	120	Brown	Gray	Orange
*MRFI 1008 – 220 □T	22000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	22	4.80	110	Red	Red	Orange
*MRFI 1008 – 270 □T	27000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	21	5.30	95	Red	Violet	Orange
*MRFI 1008 – 330 □T	33000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	20	6.10	85	Orange	Orange	Orange
*MRFI 1008 – 390 □T	39000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	18	8.30	60	Orange	White	Orange
*MRFI 1008 – 470 □T	47000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	17	12.60	45	Yellow	Violet	Orange

Note: \* For values not listed, please consult your salesperson.

NOTE: \* All values higher than 1000nH (1.0 uH) have a Ferrite core with Lead Free solder plating.

- NOTE**
- Inductance: HP-4287A RF LCR meter with HP-16193 fixture
  - Q: HP-4287A RF LCR meter with HP-16193 fixture
  - S.R.F (Self-resonance Frequency) ENA E5071B network analyzer
  - R<sub>DC</sub> (DC Resistance): HP-4338B milliohmeter
  - I<sub>DC</sub> (Allowable Current)
  - □ (Inductance Tolerance) (B = ±0.2nH, S = ±0.3nH, G = ±2% J = ±5%, K = ±10%, M = ±20%)



These parts are marked with 3 color dots. The table above shows the significance of each color. Dots 1 and 2 indicate the inductance in nanoHenries. Dot 3 indicates the number of zeros to be added.

**Examples:**

- Gray Red Black = 82nH
- Brown Red Brown = 120 nH
- Yellow Violet Red = 4700nH

### Color Code Scheme (nH)

Color Code	Significant Digit Associated with Color	Color Code	Significant Digit Associated with Color
Black	0	Green	5
Brown	1	Blue	6
Red	2	Violet	7
Orange	3	Gray	8
Yellow	4	White	9

**NOTE:** For values below 10nH, the color code scheme does not apply. Refer to the data sheet for actual values.

# Miniature RF Chip Inductors

## MRFI 1210 SERIES (3225) - Electrical Characteristics

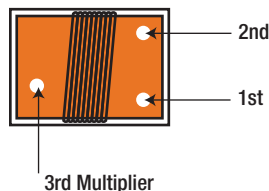
Part Number	Inductance (nH)	Tolerance	Q Min.	S.R.F. Min. (MHz)	R <sub>dc</sub> Max (Ω)	I <sub>bc</sub> Max (mA)	Color Coding		
							1st	2nd	3rd
MRFI 1210 - 4N7 □T	4.7 @ 100 MHz	B, S	50 @ 1000 MHz	6,000	0.06	1000	Black	Yellow	Violet
MRFI 1210 - 5N6 □T	5.6 @ 100 MHz	K, J, B	50 @ 1000 MHz	5,500	0.06	1000	Black	Green	Blue
MRFI 1210 - 10N □T	10 @ 100 MHz	K, J, G	60 @ 500 MHz	4,000	0.06	1000	Brown	Black	Black
MRFI 1210 - 12N □T	12 @ 100 MHz	K, J, G	60 @ 500 MHz	3,400	0.06	1000	Brown	Red	Black
MRFI 1210 - 15N □T	15 @ 100 MHz	K, J, G	60 @ 500 MHz	3,200	0.06	1000	Brown	Green	Black
MRFI 1210 - 18N □T	18 @ 100 MHz	K, J, G	60 @ 300 MHz	2,800	0.06	1000	Brown	Gray	Black
MRFI 1210 - 22N □T	22 @ 100 MHz	K, J, G	60 @ 300 MHz	2,100	0.08	1000	Red	Red	Black
MRFI 1210 - 27N □T	27 @ 100 MHz	K, J, G	60 @ 300 MHz	1,900	0.08	1000	Red	Violet	Black
MRFI 1210 - 33N □T	33 @ 100 MHz	K, J, G	60 @ 300 MHz	1,700	0.08	1000	Orange	Orange	Black
MRFI 1210 - 39N □T	39 @ 100 MHz	K, J, G	60 @ 300 MHz	1,700	0.08	1000	Orange	White	Black
MRFI 1210 - 47N □T	47 @ 100 MHz	K, J, G	60 @ 300 MHz	1,400	0.08	1000	Yellow	Violet	Black
MRFI 1210 - 56N □T	56 @ 100 MHz	K, J, G	60 @ 300 MHz	1,100	0.10	1000	Green	Blue	Black
MRFI 1210 - 68N □T	68 @ 100 MHz	K, J, G	60 @ 300 MHz	1,000	0.10	1000	Blue	Gray	Black
MRFI 1210 - 82N □T	82 @ 100 MHz	K, J, G	60 @ 300 MHz	1,000	0.10	1000	Gray	Red	Black
MRFI 1210 - R10 □T	100 @ 100 MHz	K, J, G	60 @ 300 MHz	900	0.10	1000	Brown	Black	Brown
MRFI 1210 - R12 □T	120 @ 50 MHz	K, J, G	60 @ 300 MHz	900	0.12	800	Brown	Red	Brown
MRFI 1210 - R15 □T	150 @ 50 MHz	K, J, G	60 @ 300 MHz	800	0.18	800	Brown	Green	Brown
MRFI 1210 - R18 □T	180 @ 50 MHz	K, J, G	60 @ 300 MHz	760	0.21	800	Brown	Gray	Brown
MRFI 1210 - R22 □T	220 @ 50 MHz	K, J, G	60 @ 300 MHz	660	0.27	800	Red	Red	Brown
MRFI 1210 - R27 □T	270 @ 50 MHz	K, J, G	50 @ 300 MHz	600	0.33	700	Red	Violet	Brown
MRFI 1210 - R33 □T	330 @ 50 MHz	K, J, G	50 @ 100 MHz	550	0.37	650	Orange	Orange	Brown
MRFI 1210 - R39 □T	390 @ 50 MHz	K, J, G	50 @ 100 MHz	500	0.63	600	Orange	White	Brown
MRFI 1210 - R47 □T	470 @ 50 MHz	K, J, G	50 @ 100 MHz	450	0.69	550	Yellow	Violet	Brown
MRFI 1210 - R56 □T	560 @ 50 MHz	K, J, G	50 @ 100 MHz	400	0.90	450	Green	Blue	Brown
MRFI 1210 - R68 □T	680 @ 25 MHz	K, J, G	50 @ 100 MHz	380	1.05	400	Blue	Gray	Brown
MRFI 1210 - R82 □T	820 @ 25 MHz	K, J, G	50 @ 100 MHz	350	1.45	350	Gray	Red	Brown
MRFI 1210 - 1R0 □T	1000 @ 25 MHz	K, J, G	45 @ 100 MHz	300	1.90	280	Brown	Black	Red
MRFI 1210 - 1R2 □T	1200 @ 7.96 MHz	K, J	45 @ 50 MHz	300	2.20	250	Brown	Red	Red
MRFI 1210 - 1R5 □T	1500 @ 7.96 MHz	K, J	45 @ 50 MHz	250	2.43	220	Brown	Green	Red
MRFI 1210 - 1R8 □T	1800 @ 7.96 MHz	K, J	45 @ 50MHz	200	3.36	180	Brown	Gray	Red
MRFI 1210 - 2R2 □T	2200 @ 7.96 MHz	K, J	40 @ 50 MHz	200	3.50	150	Red	Red	Red

NOTE: All values 2200nH (2.2 uH) and lower have a Ceramic core with Gold plating.

Note: \* For values not listed, please consult your salesperson.

### NOTE

- Inductance: HP-4287A RF LCR meter with HP-16193 fixture
- Q: HP-4287A RF LCR meter with HP-16193 fixture
- S.R.F (Self-resonance Frequency) ENA E5071B network analyzer
- R<sub>dc</sub> (DC Resistance): HP-4338B millohmmeter
- I<sub>bc</sub> (Allowable Current)
- □ (Inductance Tolerance) (B = ±0.2nH, S = ±0.3nH, G = ±2% J = ±5%, K = ±10%, M = ±20%)



These parts are marked with 3 color dots. The table above shows the significance of each color. Dots 1 and 2 indicate the inductance in nanoHenries. Dot 3 indicates the number of zeros to be added.

### Examples:

Gray Red Black = 82nH  
 Brown Red Brown = 120 nH  
 Yellow Violet Red = 4700nH

### Values below 10nH

On these parts, the third dot is not a multiplier. Refer to the table above for specific inductance values.

MRFI 1210 Series  
 Black Gray Red = 8.2nH

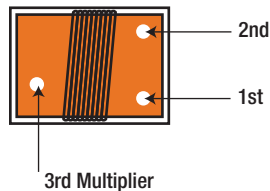
# MRFI 1210 SERIES (3225) - Electrical Characteristics

Part Number	Inductance (nH)	Tolerance	Q Min.	S.R.F. Min. (MHz)	Rdc Max (Ω)	Idc Max (mA)	Color Coding		
							1st	2nd	3rd
*MRFI 1210 – 1R2 □T	1200 @ 7.96 MHz	K, J	30 @ 7.96 MHz	100	0.70	390	Brown	Red	Red
*MRFI 1210 – 1R5 □T	1500 @ 7.96 MHz	K, J	30 @ 7.96 MHz	85	0.75	370	Brown	Green	Red
*MRFI 1210 – 1R8 □T	1800 @ 7.96 MHz	K, J	30 @ 7.96 MHz	80	0.80	350	Brown	Gray	Red
*MRFI 1210 – 2R2 □T	2200 @ 7.96 MHz	K, J	30 @ 7.96 MHz	75	0.90	320	Red	Red	Red
*MRFI 1210 – 2R7 □T	2700 @ 7.96 MHz	K, J	30 @ 7.96 MHz	70	1.10	290	Red	Violet	Red
*MRFI 1210 – 3R3 □T	3300 @ 7.96 MHz	K, J	30 @ 7.96 MHz	60	1.40	260	Orange	Orange	Red
*MRFI 1210 – 3R9 □T	3900 @ 7.96 MHz	K, J	30 @ 7.96 MHz	55	1.70	250	Orange	White	Red
*MRFI 1210 – 4R7 □T	4700 @ 7.96 MHz	K, J	30 @ 7.96 MHz	50	2.30	220	Yellow	Violet	Red
*MRFI 1210 – 5R6 □T	5600 @ 7.96 MHz	K, J	20 @ 7.96 MHz	47	1.60	200	Green	Blue	Red
*MRFI 1210 – 6R8 □T	6800 @ 7.96 MHz	K, J	20 @ 7.96 MHz	43	2.20	180	Blue	Gray	Red
*MRFI 1210 – 8R2 □T	8200 @ 7.96 MHz	K, J	20 @ 7.96 MHz	40	2.40	170	Gray	Red	Red
*MRFI 1210 – 100 □T	10000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	36	3.28	150	Brown	Black	Orange
*MRFI 1210 – 120 □T	12000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	33	3.40	140	Brown	Red	Orange
*MRFI 1210 – 150 □T	15000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	30	3.90	125	Brown	Green	Orange
*MRFI 1210 – 180 □T	18000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	27	4.20	110	Brown	Gray	Orange
*MRFI 1210 – 220 □T	22000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	25	6.00	90	Red	Red	Orange
*MRFI 1210 – 270 □T	27000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	20	6.80	80	Red	Violet	Orange
*MRFI 1210 – 330 □T	33000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	17	7.50	70	Orange	Orange	Orange
*MRFI 1210 – 390 □T	39000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	16	8.00	65	Orange	White	Orange
*MRFI 1210 – 470 □T	47000 @ 2.52 MHz	K, J	15 @ 2.52 MHz	15	8.50	60	Yellow	Violet	Orange

Note: \* For values not listed, please consult your salesperson.

NOTE: \* All values on this page 1200nH (1.2 uH) and higher have a Ferrite core with Lead Free solder plating.

- NOTE**
- Inductance: HP-4287A RF LCR meter with HP-16193 fixture
  - Q: HP-4287A RF LCR meter with HP-16193 fixture
  - S.R.F (Self-resonance Frequency) ENA E5071B network analyzer
  - Rdc (DC Resistance): HP-4338B milliohmeter
  - Idc (Allowable Current)
  - □ (Inductance Tolerance) (B = ±0.2nH, S = ±0.3nH, G = ±2% J = ±5%, K = ±10%, M = ±20%)



These parts are marked with 3 color dots. The table above shows the significance of each color. Dots 1 and 2 indicate the inductance in nanoHenries. Dot 3 indicates the number of zeros to be added.

**Examples:**

- Gray Red Black = 82nH
- Brown Red Brown = 120 nH
- Yellow Violet Red = 4700nH

### Color Code Scheme (nH)

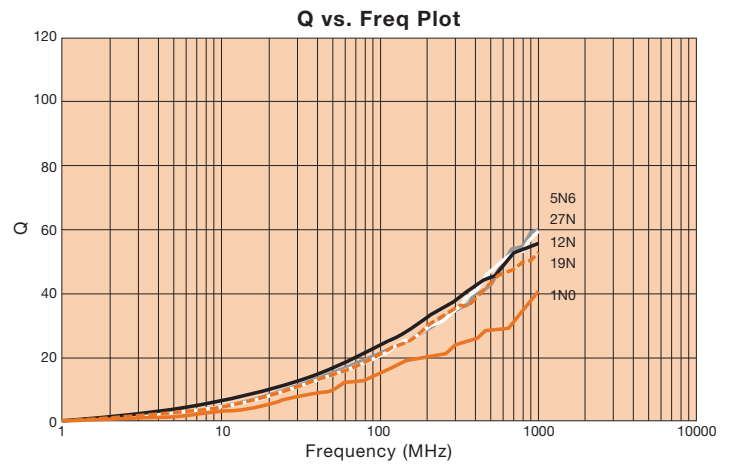
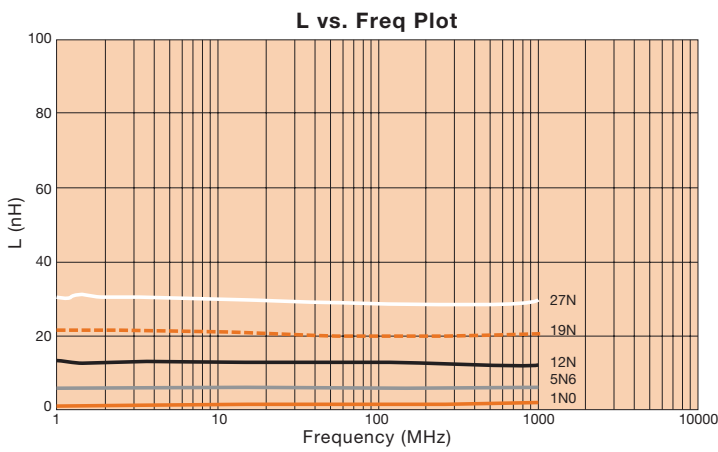
Color Code	Significant Digit Associated with Color	Color Code	Significant Digit Associated with Color
Black	0	Green	5
Brown	1	Blue	6
Red	2	Violet	7
Orange	3	Gray	8
Yellow	4	White	9

**NOTE:** For values below 10nH, the color code scheme does not apply. Refer to the data sheet for actual values.

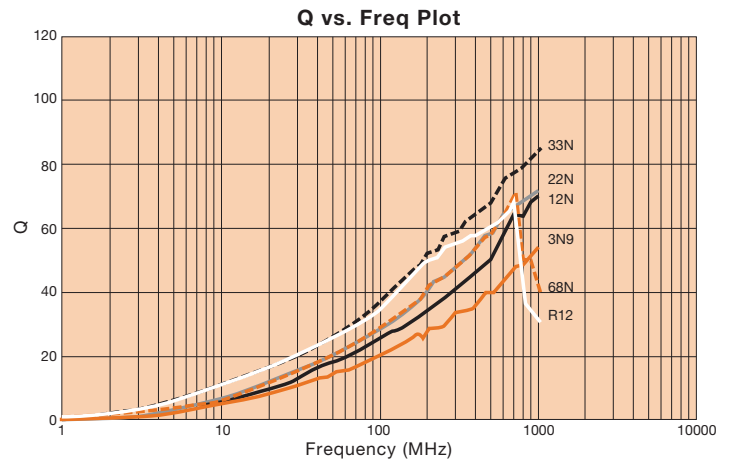
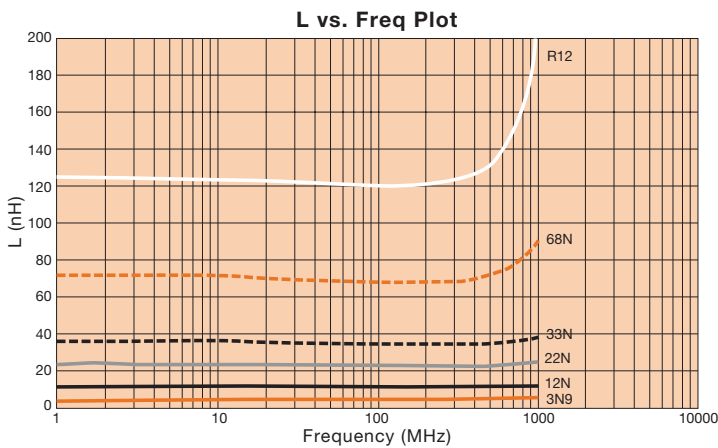


# Miniature RF Chip Inductors

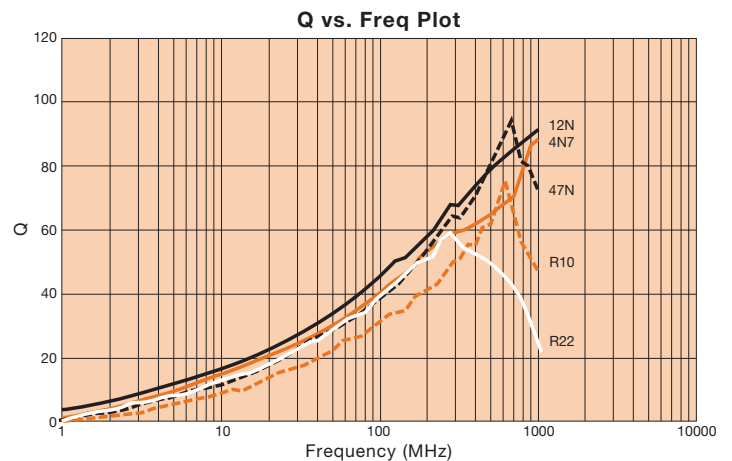
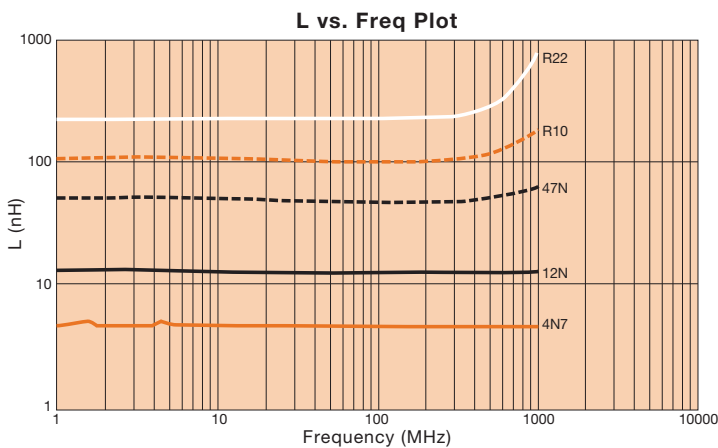
## 0402 (1005)



## 0603 (1608)

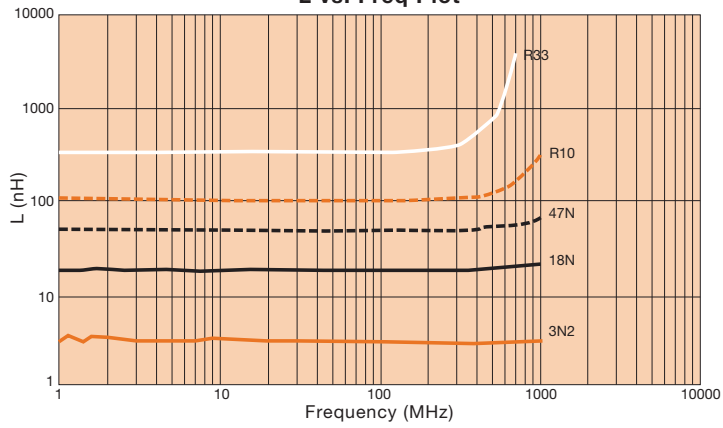


## 0805 (2012)

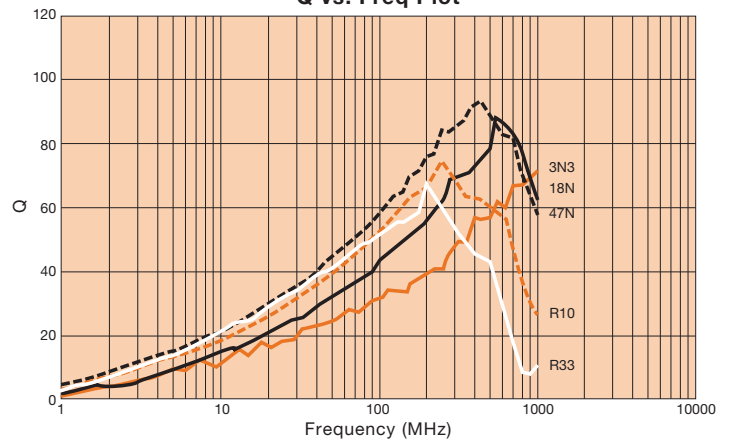


## 1008 (2520)

L vs. Freq Plot

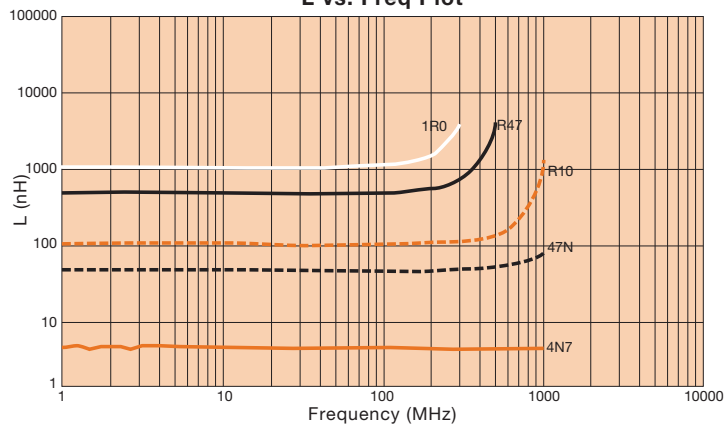


Q vs. Freq Plot

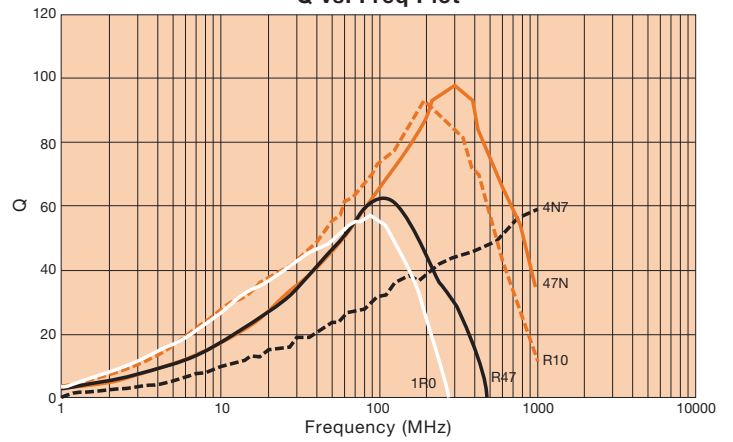


## 1210 (3225)

L vs. Freq Plot



Q vs. Freq Plot



# Miniature RF Chip Inductors

## General Characteristics

### Operating Temperature Range

Operating Temperature Range is the range of ambient temperature at which the inductor can be operated continuously at rated current.

#### Temp. Range:

Ceramic material	-40°C to + 125°C
Ferrite material	-40°C to + 85°C

### Characteristics

#### Standards Atmospheric Conditions

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and tests are as follows:

<b>Ambient Temperature:</b>	25°C (20°C) ± 2°C
<b>Relative Humidity:</b>	60% to 70%
<b>Air Pressure:</b>	86 Kpa to 106 Kpa

Item	Condition	Specification
<b>Inductance and Tolerance</b>	Measuring frequency: As shown in Product Table Measuring temperature: 25°C	Within specified tolerance
<b>Quality Factor</b>	Measuring frequency: As shown in Product Table Measuring temperature: 25°C	Within specified tolerance
<b>Insulation Resistance</b>	Measured at 100 VDC between inductor terminal and enclosure.	1000 mega ohms minimum
<b>Dielectric Withstanding Voltage</b>	Measured at 500 VAC between terminal and enclosure for a maximum of 1 minute.	No damage occurs when the test voltage is applied.
<b>Temperature Coefficient of Inductance (TCL)</b>	Over -40°C to +85°C at frequency specified in Product Table.	+25 to 500 PPM/°C $TCL = \frac{L1 - L2}{L1 (T1-T2)} \times 10^6$ (PPM/°C)
<b>Component Adhesion (PUSH TEST)</b>	The component should be reflow soldered onto a P.C. Board (230°C 20 seconds) using a dynameter force gauge apply force to any side of the component.	The component must withstand a minimum force of 1 Kg for Pt/Ag termination and 2 Kg for Mo/Mn termination without any failure of the termination to component attachment.
<b>Thermal Shock Test</b>	Each cycle should consist of 30 minutes at -40°C followed by 30 minutes at +85°C with a 20 second maximum transition time between temperature extremes. Test duration is 10 cycles.	<i>Change In Inductance:</i> No more than 5% <i>Change in Q:</i> No more than 10%
<b>Solderability</b>	Dip pads in flux and dip in solder pot (63Sn/37Pb) at 230°C ±5°C for 5 seconds.	A minimum of 80% of the metalized area being covered with solder.
<b>Resistance to Soldering Heat</b>	Dip the components into flux and dip into solder pot containing 63Sn/37Pb at 260°C ±5°C for 5 seconds ± 1 second.	<i>Change In Inductance:</i> No more than 5% <i>Change In Q:</i> No more than 10%
<b>Vibration (Random)</b>	Inductors should be randomly vibrated per NAVMAT P9492 profile. Sample should be subjected to 10-2,000 Hz: 0.04 G/Hz for a minimum of 15 minutes per axis for each of three axes.	<i>Change In Inductance:</i> No more than 5% <i>Change In Q:</i> No more than 10%
<b>Moisture Resistance</b>	Inductors should be stored in the chamber at 45°C at 90 - 95% R.H. for 240 hours, and then the inductors are to be tested after 2 hours at room temperature.	<i>Change In Inductance:</i> No more than 5% <i>Change In Q:</i> No more than 10%
<b>Cold Temperature Storage</b>	Inductors should be stored at a temperature of -40°C for ±2 hours. Then it should be subjected to standard atmospheric conditions for 1 hour. After that, measurement should be made.	<i>Change In Inductance:</i> No more than 5% <i>Change In Q:</i> No more than 10%.
<b>High Temperature Storage</b>	Inductors should be stored at a temperature of 125°C ± 2°C for 48 ± 2 hours. Then it should be subjected to standard atmospheric conditions for 1 hour. After that, measurement should be made.	<i>Change In Inductance:</i> No more than 5% <i>Change In Q:</i> No more than 10%.
<b>High Temperature with Load</b>	Inductors should be stored in the chamber at 85°C for 1000 hours with rated current applied. Inductors should be tested at the beginning test for 500 hours, 1000 hours, and then Inductors are to be tested after 2 hours at room temperature.	<i>Change In Inductance:</i> No more than 5% <i>Change In Q:</i> No more than 10%.

All components in this section are RoHS compliant per the EU directives and definitions.