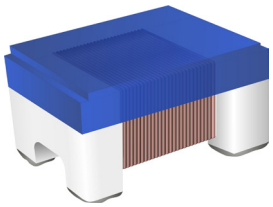
WRFI SERIES
WIREWOUND RF INDUCTORS

VENKEL LTD.



FEATURES:

- Good Q values
- High SRF
- Inductance Range: 1.0nH to 15uH
- Tolerance: ±2%, ±3%, ±5%, ±10%
- High reliability with high speed surface mount assembly capabilities
- Current ratings from 30mA to 1.36A

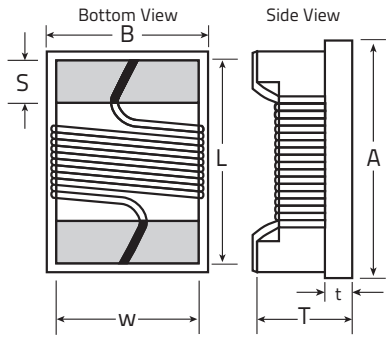
RoHS Compliant | REACH Compliant | HF Halogen FREE | Conflict Minerals FREE 3TG

PART NUMBER STRUCTURE

WRFI	0603	—	S	—	10N	K	T
Series	**Size** 0402 0603 0805 1008		**Type** S = standard		Inductance Value 1N0 = 1nH 10N = 10nH R10 = 100nH 1R0 = 1µH 103 = 10,000nH or 10µH	Tolerance G=±2% H=±3% J=±5% K=±10%	**Packaging** T = Tape and Reel

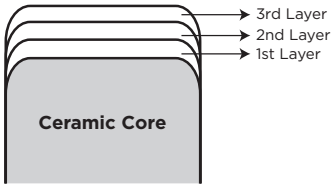
Example P/N: WRFI0603-S-10NKT

DIMENSIONS



Unit: inches (mm)

SIZE	A (max)	L (max)	W (max)	B (max)	T (max)	S	(T)
0402 (1005)	0.050 (1.27)	0.040 (1.02)	0.020 (0.51)	0.030 (0.76)	0.024 (0.61)	0.009 (0.23)	0.006 (0.15)
0603 (1608)	0.071 (1.8)	0.060 (1.52)	0.03 (0.76)	0.044 (1.12)	0.04 (1.02)	0.013 (0.33)	0.015 (0.38)
0805 (2012)	0.090 (2.29)	0.075 (1.90)	0.050 (1.27)	0.068 (1.73)	0.06 (1.52)	0.017 (0.44)	0.020 (0.51)
1008 (2520)	0.115 (2.92)	0.01 (2.54)	0.080 (2.03)	0.011 (2.79)	0.084 (2.13)	0.020 (0.51)	0.026 (0.65)



	Termination
1st Layer	Palladium Silver (PdAg)
2nd layer	Nickel Plating (Ni)
3rd layer	Tin Plating (Sn)

OPERATING TEMPERATURE

Operating Temperature Range: -40°C to + 125°C
Recommended Storage Conditions: Temperature: +22˚C ± 7˚C; Humidity: <70% R.H.

ELECTRICAL SPECIFICATIONS AND RANGE

0402 (CERAMIC CORE)

INDUCTANCE (NH)	TOLERANCE (□)	TEST FREQ. (MHZ)	Q MIN.	SELF-RESONANT FREQUENCY (MHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
1	±10%	250	16	12700	0.045	1360	WRFI0402-S-1N0KT
1.9	±10%	250	16	11300	0.07	1040	WRFI0402-S-1N9KT
2	±10%	250	16	11100	0.07	1040	WRFI0402-S-2N0KT
2.2	±10%	250	19	10800	0.07	960	WRFI0402-S-2N2KT
2.4	±10%	250	15	10500	0.07	790	WRFI0402-S-2N4KT
2.7	±10%	250	16	10400	0.12	640	WRFI0402-S-2N7KT
3.3	±10%	250	19	7000	0.066	840	WRFI0402-S-3N3KT
3.6	±5, ±10%	250	19	6800	0.066	840	WRFI0402-S-3N6□T
3.9	±5, ±10%	250	19	5800	0.066	840	WRFI0402-S-3N9□T
4.3	±5, ±10%	250	18	6000	0.091	700	WRFI0402-S-4N3□T
4.7	±5, ±10%	250	18	4700	0.13	640	WRFI0402-S-4N7□T
5.1	±5, ±10%	250	20	4800	0.083	800	WRFI0402-S-5N1□T
5.6	±5, ±10%	250	20	4800	0.083	760	WRFI0402-S-5N6□T
6.2	±5, ±10%	250	20	4800	0.083	760	WRFI0402-S-6N2□T
6.8	±5, ±10%	250	20	4800	0.083	680	WRFI0402-S-6N8□T
7.5	±5, ±10%	250	22	4800	0.104	680	WRFI0402-S-7N5□T
8.2	±5, ±10%	250	22	4400	0.104	680	WRFI0402-S-8N2□T
8.7	±5, ±10%	250	18	4100	0.2	480	WRFI0402-S-8N7□T
9	±5, ±10%	250	22	4160	0.104	680	WRFI0402-S-9N0□T
9.5	±5, ±10%	250	18	4000	0.2	480	WRFI0402-S-9N5□T
10	±2, ±5, ±10%	250	21	3900	0.195	480	WRFI0402-S-10N□T
11	±2, ±5, ±10%	250	24	3680	0.12	640	WRFI0402-S-11N□T
12	±2, ±5, ±10%	250	24	3600	0.12	640	WRFI0402-S-12N□T
13	±2, ±5, ±10%	250	24	3450	0.21	440	WRFI0402-S-13N□T
15	±2, ±5, ±10%	250	24	3280	0.172	560	WRFI0402-S-15N□T
16	±2, ±5, ±10%	250	24	3100	0.22	560	WRFI0402-S-16N□T
18	±2, ±5, ±10%	250	25	3100	0.23	420	WRFI0402-S-18N□T
19	±2, ±5, ±10%	250	24	3040	0.202	480	WRFI0402-S-19N□T
20	±2, ±5, ±10%	250	25	3000	0.25	420	WRFI0402-S-20N□T
22	±2, ±5, ±10%	250	25	2800	0.3	400	WRFI0402-S-22N□T
23	±2, ±5, ±10%	250	24	2720	0.3	400	WRFI0402-S-23N□T
24	±2, ±5, ±10%	250	25	2700	0.3	400	WRFI0402-S-24N□T
27	±2, ±5, ±10%	250	24	2480	0.3	400	WRFI0402-S-27N□T
30	±2, ±5, ±10%	250	25	2350	0.35	400	WRFI0402-S-30N□T
33	±2, ±5, ±10%	250	24	2350	0.35	400	WRFI0402-S-33N□T
36	±2, ±5, ±10%	250	24	2320	0.44	320	WRFI0402-S-36N□T
39	±2, ±5, ±10%	250	25	2100	0.55	200	WRFI0402-S-39N□T
40	±2, ±5, ±10%	250	24	2240	0.5	320	WRFI0402-S-40N□T
43	±2, ±5, ±10%	250	25	2030	0.81	100	WRFI0402-S-43N□T
47	±2, ±5, ±10%	250	25	2100	0.83	150	WRFI0402-S-47N□T
51	±2, ±5, ±10%	250	25	1750	0.82	100	WRFI0402-S-51N□T
56	±2, ±5, ±10%	250	25	1760	0.97	100	WRFI0402-S-56N□T
68	±2, ±5, ±10%	250	22	1620	1.12	100	WRFI0402-S-68N□T
82	±2, ±5, ±10%	250	22	1260	1.55	50	WRFI0402-S-82N□T
100	±2, ±5, ±10%	250	22	1160	2	30	WRFI0402-S-R10□T
120	±2, ±5, ±10%	250	20	1800	2.66	50	WRFI0402-S-R12□T

ELECTRICAL SPECIFICATIONS AND RANGE

0603 (CERAMIC CORE)

INDUCTANCE (NH)	TOLERANCE (□)	TEST FREQ. (MHZ)	Q MIN.	SELF-RESONANT FREQUENCY (MHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
1.6	±5, ±10%	250	24	12500	0.03	700	WRFI0603-S-1N6□T
1.8	±5, ±10%	250	16	12500	0.045	700	WRFI0603-S-1N8□T
2.2	±5, ±10%	250	15	6000	0.1	700	WRFI0603-S-2N2□T
2.3	±5, ±10%	250	16	4000	0.14	700	WRFI0603-S-2N3□T
3.3	±2, ±5, ±10%	250	22	6000	0.08	700	WRFI0603-S-3N3□T
3.6	±2, ±5, ±10%	250	22	5800	0.063	700	WRFI0603-S-3N6□T
3.9	±2, ±5, ±10%	250	22	4000	0.08	700	WRFI0603-S-3N9□T
4.3	±2, ±5, ±10%	250	22	5800	0.063	700	WRFI0603-S-4N3□T
4.5	±2, ±5, ±10%	250	20	5800	0.12	700	WRFI0603-S-4N5□T
4.7	±2, ±5, ±10%	250	25	5800	0.12	700	WRFI0603-S-4N7□T
5.1	±2, ±5, ±10%	250	20	5800	0.16	700	WRFI0603-S-5N1□T
5.6	±2, ±5, ±10%	250	20	5800	0.17	700	WRFI0603-S-5N6□T
6.2	±2, ±5, ±10%	250	25	5800	0.11	700	WRFI0603-S-6N2□T
6.3	±2, ±5, ±10%	250	25	5800	0.11	700	WRFI0603-S-6N3□T
6.8	±2, ±5, ±10%	250	27	5800	0.11	700	WRFI0603-S-6N8□T
7.5	±2, ±5, ±10%	250	28	4800	0.106	700	WRFI0603-S-7N5□T
8.2	±2, ±5, ±10%	250	27	4800	0.11	700	WRFI0603-S-8N2□T
8.7	±2, ±5, ±10%	250	28	4800	0.109	700	WRFI0603-S-8N7□T
9.1	±2, ±5, ±10%	250	35	4800	0.13	700	WRFI0603-S-9N1□T
9.5	±2, ±5, ±10%	250	28	5400	0.135	700	WRFI0603-S-9N5□T
10	±2, ±5, ±10%	250	31	4800	0.13	700	WRFI0603-S-10N□T
11	±2, ±5, ±10%	250	31	4000	0.086	700	WRFI0603-S-11N□T
12	±2, ±5, ±10%	250	35	4000	0.13	700	WRFI0603-S-12N□T
15	±2, ±5, ±10%	250	35	4000	0.17	700	WRFI0603-S-15N□T
16	±2, ±5, ±10%	250	35	3300	0.11	700	WRFI0603-S-16N□T
17	±2, ±5, ±10%	250	35	3200	0.17	700	WRFI0603-S-17N□T
18	±2, ±5, ±10%	250	35	3100	0.17	700	WRFI0603-S-18N□T
20	±2, ±5, ±10%	250	40	3000	0.19	700	WRFI0603-S-20N□T
22	±2, ±5, ±10%	250	38	3000	0.19	700	WRFI0603-S-22N□T
23	±2, ±5, ±10%	250	38	2850	0.19	700	WRFI0603-S-23N□T
24	±2, ±5, ±10%	250	38	2800	0.13	700	WRFI0603-S-24N□T
27	±2, ±5, ±10%	250	40	2800	0.22	600	WRFI0603-S-27N□T
30	±2, ±5, ±10%	250	40	2800	0.15	600	WRFI0603-S-30N□T
33	±2, ±5, ±10%	250	40	2300	0.22	600	WRFI0603-S-33N□T
36	±2, ±5, ±10%	250	37	2300	0.25	600	WRFI0603-S-36N□T
39	±2, ±5, ±10%	250	40	2200	0.25	600	WRFI0603-S-39N□T
43	±2, ±5, ±10%	200	38	2000	0.28	600	WRFI0603-S-43N□T
47	±2, ±5, ±10%	200	38	2000	0.28	600	WRFI0603-S-47N□T
51	±2, ±5, ±10%	200	38	1900	0.28	600	WRFI0603-S-51N□T
56	±2, ±5, ±10%	200	38	1900	0.31	600	WRFI0603-S-56N□T
62	±2, ±5, ±10%	200	37	1800	0.34	600	WRFI0603-S-62N□T
68	±2, ±5, ±10%	200	37	1700	0.34	600	WRFI0603-S-68N□T
72	±2, ±5, ±10%	150	34	1700	0.49	600	WRFI0603-S-72N□T
82	±2, ±5, ±10%	150	34	1700	0.54	400	WRFI0603-S-82N□T
91	±2, ±5, ±10%	150	30	1700	0.5	400	WRFI0603-S-91N□T
100	±2, ±5, ±10%	150	34	1400	0.58	400	WRFI0603-S-R10□T
110	±2, ±5, ±10%	150	32	1350	0.61	300	WRFI0603-S-R11□T
120	±2, ±5, ±10%	150	32	1300	0.65	300	WRFI0603-S-R12□T
130	±2, ±5, ±10%	150	30	1400	0.72	300	WRFI0603-S-R13□T
140	±2, ±5, ±10%	100	28	1300	0.87	280	WRFI0603-S-R14□T
150	±2, ±5, ±10%	100	28	1300	0.95	280	WRFI0603-S-R15□T

ELECTRICAL SPECIFICATIONS AND RANGE

0603 (CERAMIC CORE)

INDUCTANCE (NH)	TOLERANCE (□)	TEST FREQ. (MHZ)	Q MIN.	SELF-RESONANT FREQUENCY (MHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
160	±2, ±5, ±10%	100	25	1300	1.4	280	WRFI0603-S-R16□T
180	±2, ±5, ±10%	100	25	1250	1.4	250	WRFI0603-S-R18□T
200	±2, ±5, ±10%	100	25	-	1.4	250	WRFI0603-S-R20□T
220	±2, ±5, ±10%	100	25	1200	1.6	250	WRFI0603-S-R22□T
260	±2, ±5, ±10%	100	25	1000	2	200	WRFI0603-S-R26□T
270	±2, ±5, ±10%	100	25	900	2.1	200	WRFI0603-S-R27□T
280	±2, ±5, ±10%	100	25	1000	2.4	100	WRFI0603-S-R28□T
300	±2, ±5, ±10%	100	25	750	2.5	150	WRFI0603-S-R30□T
330	±2, ±5, ±10%	100	25	900	3.8	100	WRFI0603-S-R33□T
390	±2, ±5, ±10%	100	25	900	4.35	100	WRFI0603-S-R39□T
470	±2, ±5, ±10%	100	23	600	3.6	80	WRFI0603-S-R47□T

0805 (CERAMIC CORE)

INDUCTANCE (NH)	TOLERANCE (□)	TEST FREQ. (MHZ)	Q MIN.	SELF-RESONANT FREQUENCY (MHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
2.7	±5, ±10%	250	80 @ 1500MHz	7900	0.06	800	WRFI0805-S-2N7□T
2.8	±5, ±10%	250	80 @ 1500MHz	7900	0.06	800	WRFI0805-S-2N8□T
3	±5, ±10%	250	65 @ 1500MHz	7900	0.06	800	WRFI0805-S-3N0□T
3.3	±5, ±10%	250	50 @ 1500MHz	6000	0.08	600	WRFI0805-S-3N3□T
3.9	±5, ±10%	250	50 @ 1500MHz	5500	0.08	600	WRFI0805-S-3N9□T
4.7	±5, ±10%	250	65 @ 1000MHz	5500	0.08	600	WRFI0805-S-4N7□T
5.6	±5, ±10%	250	65 @ 1000MHz	5500	0.08	600	WRFI0805-S-5N6□T
6.2	±5, ±10%	250	50 @ 1000MHz	5500	0.11	600	WRFI0805-S-6N2□T
6.8	±5, ±10%	250	50 @ 1000MHz	5500	0.11	600	WRFI0805-S-6N8□T
7.5	±5, ±10%	250	50 @ 1000MHz	4500	0.14	600	WRFI0805-S-7N5□T
8.2	±5, ±10%	250	50 @ 1000MHz	4700	0.12	600	WRFI0805-S-8N2□T
8.7	±5, ±10%	250	50 @ 1000MHz	4000	0.21	400	WRFI0805-S-8N7□T
10	±2, ±5, ±10%	250	60 @ 500MHz	4200	0.1	600	WRFI0805-S-10N□T
12	±2, ±5, ±10%	250	50 @ 500MHz	4000	0.15	600	WRFI0805-S-12N□T
15	±2, ±5, ±10%	250	50 @ 500MHz	3400	0.17	600	WRFI0805-S-15N□T
18	±2, ±5, ±10%	250	50 @ 500MHz	3300	0.2	600	WRFI0805-S-18N□T
20	±2, ±5, ±10%	250	55 @ 500MHz	2600	0.22	500	WRFI0805-S-20N□T
22	±2, ±5, ±10%	250	55 @ 500MHz	2600	0.22	500	WRFI0805-S-22N□T
24	±2, ±5, ±10%	250	50 @ 500MHz	2000	0.22	500	WRFI0805-S-24N□T
27	±2, ±5, ±10%	250	55 @ 500MHz	2500	0.25	500	WRFI0805-S-27N□T
30	±2, ±5, ±10%	250	60 @ 500MHz	2050	0.25	500	WRFI0805-S-30N□T
33	±2, ±5, ±10%	250	60 @ 500MHz	2050	0.27	500	WRFI0805-S-33N□T
36	±2, ±5, ±10%	250	55 @ 500MHz	1700	0.27	500	WRFI0805-S-36N□T
39	±2, ±5, ±10%	250	60 @ 500MHz	2000	0.29	500	WRFI0805-S-39N□T
43	±2, ±5, ±10%	200	60 @ 500MHz	1650	0.34	500	WRFI0805-S-43N□T
47	±2, ±5, ±10%	200	60 @ 500MHz	1650	0.31	500	WRFI0805-S-47N□T
56	±2, ±5, ±10%	200	60 @ 500MHz	1550	0.34	500	WRFI0805-S-56N□T
68	±2, ±5, ±10%	200	60 @ 500MHz	1450	0.38	500	WRFI0805-S-68N□T
72	±2, ±5, ±10%	150	65 @ 500MHz	1400	0.4	500	WRFI0805-S-72N□T
82	±2, ±5, ±10%	150	65 @ 500MHz	1300	0.42	400	WRFI0805-S-82N□T
91	±2, ±5, ±10%	150	65 @ 500MHz	1200	0.48	400	WRFI0805-S-91N□T
100	±2, ±5, ±10%	150	65 @ 500MHz	1200	0.46	400	WRFI0805-S-R10□T
110	±2, ±5, ±10%	150	50 @ 250MHz	1000	0.48	400	WRFI0805-S-R11□T
120	±2, ±5, ±10%	150	50 @ 250MHz	1100	0.51	400	WRFI0805-S-R12□T
150	±2, ±5, ±10%	100	50 @ 250MHz	920	0.56	400	WRFI0805-S-R15□T

ELECTRICAL SPECIFICATIONS AND RANGE

0805 (CERAMIC CORE)

INDUCTANCE (NH)	TOLERANCE (□)	TEST FREQ. (MHZ)	Q MIN.	SELF-RESONANT FREQUENCY (MHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
160	±2, ±5, ±10%	100	50 @ 250MHz	870	0.6	400	WRFI0805-S-R16□T
180	±2, ±5, ±10%	100	50 @ 250MHz	870	0.64	400	WRFI0805-S-R18□T
200	±2, ±5, ±10%	100	50 @ 250MHz	860	0.66	400	WRFI0805-S-R20□T
220	±2, ±5, ±10%	100	50 @ 250MHz	850	0.7	400	WRFI0805-S-R22□T
240	±2, ±5, ±10%	100	44 @ 250MHz	690	1	350	WRFI0805-S-R24□T
250	±2, ±5, ±10%	100	50 @ 250MHz	680	1	350	WRFI0805-S-R25□T
270	±2, ±5, ±10%	100	48 @ 250MHz	650	1	350	WRFI0805-S-R27□T
300	±2, ±5, ±10%	100	48 @ 250MHz	620	1.2	330	WRFI0805-S-R30□T
330	±2, ±5, ±10%	100	48 @ 250MHz	600	1.4	310	WRFI0805-S-R33□T
360	±2, ±5, ±10%	100	48 @ 250MHz	580	1.45	300	WRFI0805-S-R36□T
390	±2, ±5, ±10%	100	48 @ 250MHz	560	1.5	290	WRFI0805-S-R39□T
430	±2, ±5, ±10%	50	33 @ 100MHz	430	1.7	230	WRFI0805-S-R43□T
470	±2, ±5, ±10%	50	33 @ 100MHz	375	1.7	250	WRFI0805-S-R47□T
560	±2, ±5, ±10%	25	23 @ 50MHz	340	1.9	230	WRFI0805-S-R56□T
600	±2, ±5, ±10%	25	23 @ 50MHz	260	1.6	450	WRFI0805-S-R60□T
620	±2, ±5, ±10%	25	23 @ 50MHz	220	2.2	210	WRFI0805-S-R62□T
680	±2, ±5, ±10%	25	23 @ 50MHz	200	2.2	190	WRFI0805-S-R68□T
750	±2, ±5, ±10%	25	23 @ 50MHz	200	2.3	180	WRFI0805-S-R75□T
820	±2, ±5, ±10%	25	23 @ 50MHz	200	2.35	180	WRFI0805-S-R82□T
1000	±2, ±5, ±10%	25	20 @ 50MHz	100	2.5	170	WRFI0805-S-1R0□T
1200	±2, ±5, ±10%	7.9	18 @ 25MHz	100	2.5	170	WRFI0805-S-1R2□T
1500	±2, ±5, ±10%	7.9	16 @ 25MHz	100	2.5	170	WRFI0805-S-1R5□T
1800	±2, ±5, ±10%	7.9	16 @ 7.9MHz	80	2.5	170	WRFI0805-S-1R8□T
2200	±2, ±5, ±10%	7.9	16 @ 7.9MHz	60	2.7	160	WRFI0805-S-2R2□T
2700	±2, ±5, ±10%	7.9	16 @ 7.9MHz	50	3.1	150	WRFI0805-S-2R7□T
3300	±2, ±5, ±10%	7.9	15 @ 7.9MHz	40	4.4	90	WRFI0805-S-3R3□T
4700	±2, ±5, ±10%	7.9	15 @ 7.9MHz	40	6.4	90	WRFI0805-S-4R7□T

1008 (CERAMIC CORE)

INDUCTANCE (NH)	TOLERANCE (□)	TEST FREQ. (MHZ)	Q MIN.	SELF-RESONANT FREQUENCY (MHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
4.7	±5, ±10%	50	50 @ 1500MHz	4000	0.15	1000	WRFI1008-S-4N7□T
*5.6	±5, ±10%	50	50 @ 1500MHz	4000	0.15	1000	WRFI1008-S-5N6□T
*10	±2, ±5, ±10%	50	50 @ 500MHz	4100	0.08	1000	WRFI1008-S-10N□T
*12	±2, ±5, ±10%	50	50 @ 500MHz	3300	0.09	1000	WRFI1008-S-12N□T
*15	±2, ±5, ±10%	50	50 @ 500MHz	2500	0.11	1000	WRFI1008-S-15N□T
*18	±2, ±5, ±10%	50	50 @ 350MHz	2400	0.12	1000	WRFI1008-S-18N□T
*22	±2, ±5, ±10%	50	55 @ 350MHz	2400	0.12	1000	WRFI1008-S-22N□T
24	±2, ±5, ±10%	50	55 @ 350MHz	1900	0.13	1000	WRFI1008-S-24N□T
*27	±2, ±5, ±10%	50	55 @ 350MHz	1600	0.13	1000	WRFI1008-S-27N□T
30	±2, ±5, ±10%	50	60 @ 350MHz	1600	0.14	1000	WRFI1008-S-30N□T
*33	±2, ±5, ±10%	50	60 @ 350MHz	1600	0.14	1000	WRFI1008-S-33N□T
36	±2, ±5, ±10%	50	60 @ 350MHz	1600	0.15	1000	WRFI1008-S-36N□T
*39	±2, ±5, ±10%	50	60 @ 350MHz	1500	0.15	1000	WRFI1008-S-39N□T
*47	±2, ±5, ±10%	50	65 @ 350MHz	1500	0.16	1000	WRFI1008-S-47N□T
*56	±2, ±5, ±10%	50	65 @ 350MHz	1300	0.18	1000	WRFI1008-S-56N□T
*62	±2, ±5, ±10%	50	65 @ 350MHz	1250	0.2	1000	WRFI1008-S-62N□T
*68	±2, ±5, ±10%	50	65 @ 350MHz	1300	0.2	1000	WRFI1008-S-68N□T
75	±2, ±5, ±10%	50	60 @ 350MHz	1100	0.21	1000	WRFI1008-S-75N□T

* Test method for these values uses a Network / Spectrum Analyzer. All other values use a HP4287 LCR meter.

ELECTRICAL SPECIFICATIONS AND RANGE

1008 (CERAMIC CORE)

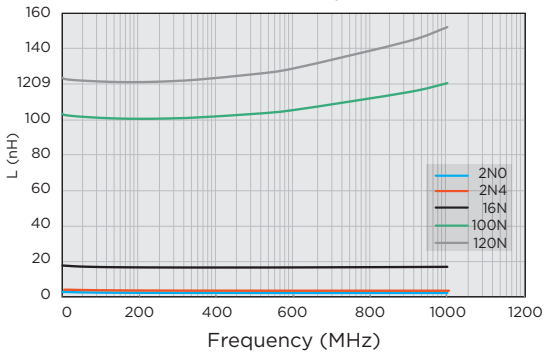
INDUCTANCE (NH)	TOLERANCE (□)	TEST FREQ. (MHZ)	Q MIN.	SELF-RESONANT FREQUENCY (MHZ)	DC RESISTANCE (Ω)	RATED CURRENT (MA)	VENKEL PART NUMBER
*82	±2, ±5, ±10%	50	60 @ 350MHz	1000	0.22	1000	WRFI1008-S-82N□T
91	±2, ±5, ±10%	50	50 @ 350MHz	1000	0.45	1000	WRFI1008-S-91N□T
*100	±2, ±5, ±10%	25	60 @ 350MHz	1000	0.56	650	WRFI1008-S-R10□T
*120	±2, ±5, ±10%	25	60 @ 350MHz	950	0.63	650	WRFI1008-S-R12□T
*150	±2, ±5, ±10%	25	45 @ 100MHz	850	0.7	800	WRFI1008-S-R15□T
*180	±2, ±5, ±10%	25	45 @ 100MHz	750	0.77	620	WRFI1008-S-R18□T
*220	±2, ±5, ±10%	25	45 @ 100MHz	700	0.84	500	WRFI1008-S-R22□T
*240	±2, ±5, ±10%	25	45 @ 100MHz	650	0.88	500	WRFI1008-S-R24□T
*270	±2, ±5, ±10%	25	45 @ 100MHz	600	0.91	690	WRFI1008-S-R27□T
*300	±2, ±5, ±10%	25	45 @ 100MHz	585	1	450	WRFI1008-S-R30□T
*330	±2, ±5, ±10%	25	45 @ 100MHz	570	1.05	450	WRFI1008-S-R33□T
*360	±2, ±5, ±10%	25	45 @ 100MHz	530	1.1	470	WRFI1008-S-R36□T
*390	±2, ±5, ±10%	25	45 @ 100MHz	500	1.12	630	WRFI1008-S-R39□T
*430	±2, ±5, ±10%	25	45 @ 100MHz	480	1.15	470	WRFI1008-S-R43□T
*470	±2, ±5, ±10%	25	45 @ 100MHz	450	1.19	470	WRFI1008-S-R47□T
*560	±2, ±5, ±10%	25	45 @ 100MHz	415	1.33	580	WRFI1008-S-R56□T
*620	±2, ±5, ±10%	25	45 @ 100MHz	375	1.4	300	WRFI1008-S-R62□T
*680	±2, ±5, ±10%	25	45 @ 100MHz	375	1.47	540	WRFI1008-S-R68□T
*750	±2, ±5, ±10%	25	45 @ 100MHz	360	1.54	360	WRFI1008-S-R75□T
*820	±2, ±5, ±10%	25	45 @ 100MHz	350	1.61	400	WRFI1008-S-R82□T
*910	±2, ±5, ±10%	25	35 @ 50MHz	320	1.68	380	WRFI1008-S-R91□T
*1000	±2, ±5, ±10%	25	35 @ 50MHz	290	1.75	370	WRFI1008-S-1R0□T
*1200	±2, ±5, ±10%	7.9	35 @ 50MHz	250	2	310	WRFI1008-S-1R2□T
*1500	±2, ±5, ±10%	7.9	28 @ 50MHz	200	2.3	330	WRFI1008-S-1R5□T
*1800	±2, ±5, ±10%	7.9	28 @ 50MHz	160	2.6	300	WRFI1008-S-1R8□T
*2200	±2, ±5, ±10%	7.9	28 @ 50MHz	160	2.8	280	WRFI1008-S-2R2□T
*2700	±2, ±5, ±10%	7.9	22 @ 25MHz	140	3.2	290	WRFI1008-S-2R7□T
*3300	±2, ±5, ±10%	7.9	22 @ 25MHz	110	3.4	290	WRFI1008-S-3R3□T
*3900	±2, ±5, ±10%	7.9	18 @ 25MHz	100	3.6	260	WRFI1008-S-3R9□T
*4700	±2, ±5, ±10%	7.9	18 @ 25MHz	90	4	260	WRFI1008-S-4R7□T
5600	±2, ±5, ±10%	7.9	16 @ 7.96MHz	20	4	240	WRFI1008-S-5R6□T
6800	±2, ±5, ±10%	7.9	15 @ 7.96MHz	40	4.9	200	WRFI1008-S-6R8□T
8200	±2, ±5, ±10%	7.9	15 @ 7.96MHz	25	6	170	WRFI1008-S-8R2□T
10000	±2, ±5, ±10%	2.52	15 @ 7.96MHz	20	9	150	WRFI1008-S-103□T
12000	±2, ±5, ±10%	2.52	15 @ 7.96MHz	18	10.5	130	WRFI1008-S-123□T
15000	±2, ±5, ±10%	2.52	15 @ 7.96MHz	15	11.5	120	WRFI1008-S-153□T

* Test method for these values uses a Network / Spectrum Analyzer. All other values use a HP4287 LCR meter.

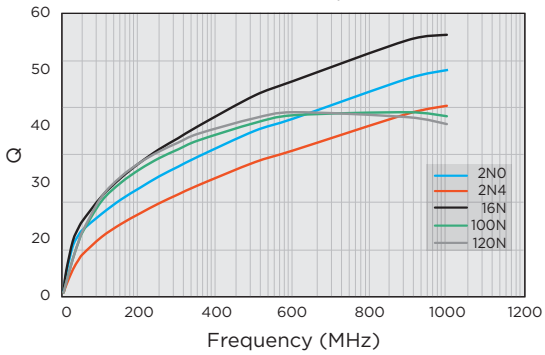
ELECTRICAL CHARACTERISTICS

0402

L vs. Freq.

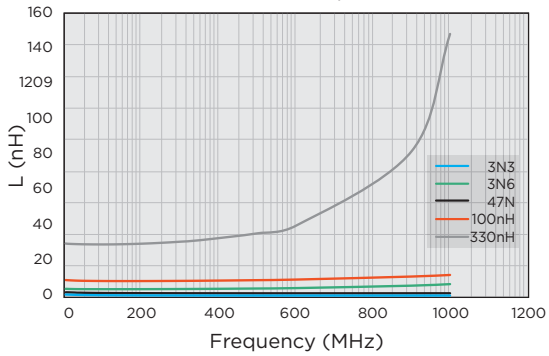


Q vs. Freq.

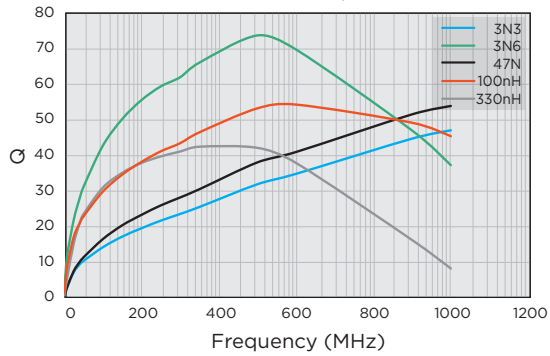


0603

L vs. Freq.

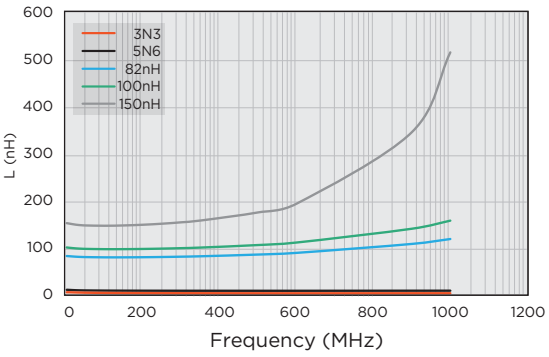


Q vs. Freq.

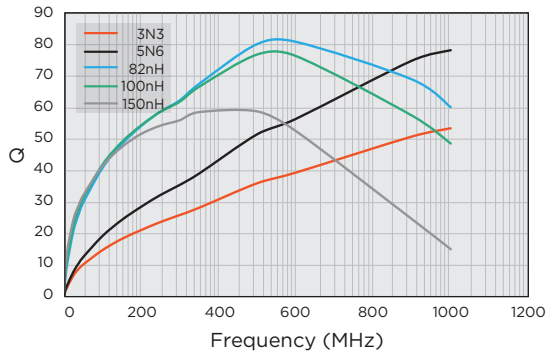


0805

L vs. Freq.

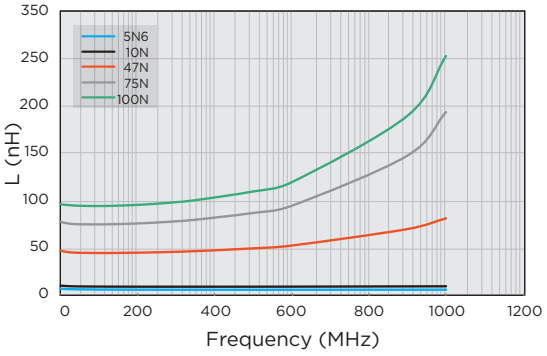


Q vs. Freq.

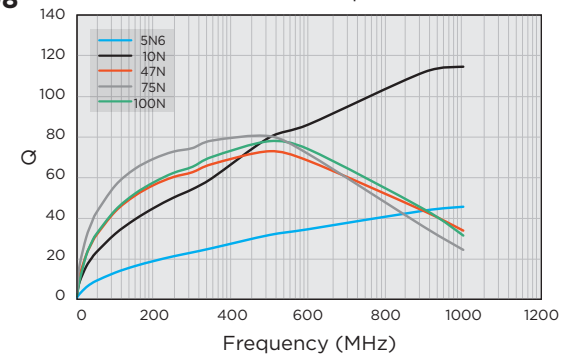


1008

L vs. Freq.



Q vs. Freq.

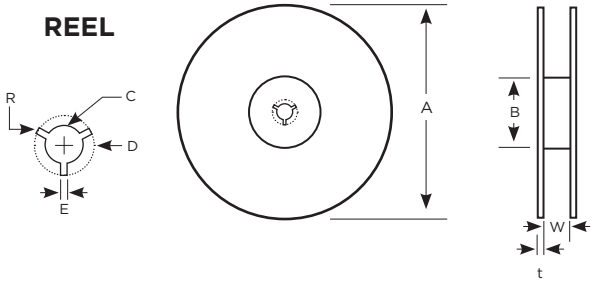


TAPE AND REEL SPECIFICATIONS

Unit: mm

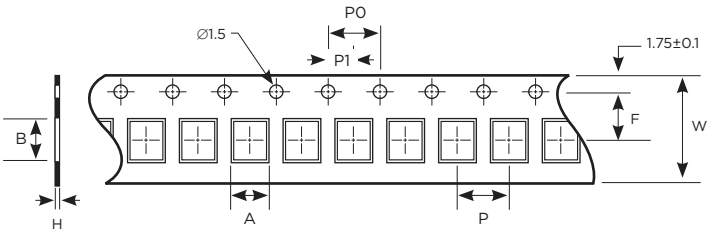
Tape Width	8mm
A	178 ± 2.0
B	60 ± 0.5
C	∅13.0 ± 0.3
D	∅21.8 ± 0.8
E	2.0 ± 0.5
W	9 ± 0.3
t	1.2 ± 0.2
R	1.0

REEL

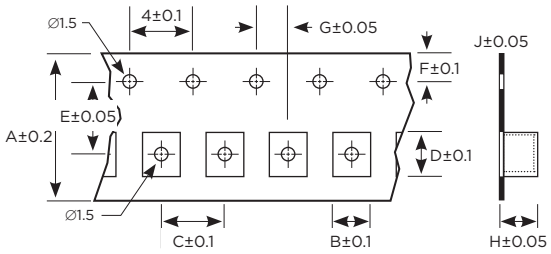


CARRIER TAPE

Paper



Embossed



Unit: mm

Size	0402	0603
Tape	Paper Tape	Paper Tape
A	0.81	1.35
B	1.23	1.95
H	0.73	0.95
F	3.50	3.50
P	2.00	4.00
P_0	4.00	4.00
P_1	2.00	2.00
W	8.00	8.00
Qty/Reel	**4,000**	**4,000**

Size	0805	1008
Tape	Embossed Tape	Embossed Tape
A	8.00	8.00
B	1.85	1.95
C	4.00	4.00
D	3.50	2.30
E	3.50	3.50
F	1.75	1.75
G	2.00	2.00
H	1.45	1.50
J	0.23	0.23
Qty/Reel	**2,000**	**2,000**

ELECTRICAL CHARACTERISTICS

Electrical Performance Test

TEST	REQUIREMENT	TEST METHOD
Inductance	Refer to standard electrical characteristic spec.	HP4286/E4982A
Q		HP4286/E4982A
SRF		HP4287/E4982A
DC Resistance RDC		Micro-Ohm meter (Gom-801G)/E4982A
Rated Current IDC		Apply current to coil, the temperature of coil increases ΔT of 15˚C (Ta=25).
Overload	Inductors shall have no evidence of electrical and mechanical damage.	Applied 2 times of rated allowed DC current to inductor for a period of 5 minutes
Withstanding Voltage	Inductors shall have no evidence of electrical and mechanical damage.	AC voltage of 500 VAC applied between inductors terminal and case for 1 min.
Insulation Resistance	1000M ohm min.	100 VDC applied between inductor terminal and case
Mechanical Performance Test		
TEST	**REQUIREMENT**	**TEST METHOD**
Vibration	Appearance: No damage L change: within ±5% Q change: within ±10%	Test device shall be soldered on the substrate Oscillation Frequency: 10 to 55 to 10Hz for 1 min. Amplitude: 1.5 mm Time: 2 hrs for each axis (X, Y & Z), total 6 hrs
Resistance to Soldering Heat		Solder Temperature: 260±5°C Immersion Time: 10±2 seconds
Component Adhesion (Push Test)	1 lbs. For 0402 2 lbs. For 0603 3 lbs. For the rest	The device should be soldered (260±5 for 10 seconds) to a tinned copper substrate. A dynamiter force gauge should be applied to the side of the component. The device must with stand a minimum force of 2 or 4 pounds without a failure of adhesion on termination
Drop Test	No damage	Dropping chip by each side and each corner. Drop 10 times in total Drop height: 100 cm Drop weight: 125 g
Solderability	90% covered with solder	Inductor shall be dipped in a melted solder bath at 245±5 for 3 seconds
Resistance to Solvent	No damage on appearance and marking	MIL-STD-202, Method 215

Climatic Test

TEST	REQUIREMENT	TEST METHOD
Temperature Characteristic	Appearance: No damage L change: within ±10% Q change: within ±20% 90% covered with solder	-40~+125°C
Humidity		Temperature: 40±2°C Relative Humidity: 90-95% Time: 96±2 hrs Measured after exposure in the room condition for 2 hrs
Low Temperature Storage		Temperature: -40±2°C Time: 96±2 hrs Inductors are tested after 1 hour at room temperature
Thermal Shock		One cycle: Step / Temperature (°C) / Time (min.) 1 / -25±3 / 30 2 / 25±2 / 15 3 / 125±3 / 30 4 / 25±2 / 15 Total: 5 cycles
High Temperature Storage		Temperature: 125±2°C Time: 96±2 hrs Measured after exposure in the room condition for 1hour
High Temperature Load Life	There should be no evidence of short or open circuit.	Temperature: 85±2°C Time: 1000±12 hrs Load: Allowed DC current
Damp Heat with Load		Temperature: 40±2°C Relative Humidity: 90-95% Time: 1000±12 hrs Load: Allowed DC current

Storage Temperature: 15-28°C; Humidity < 80%RHL