

T Y P E W I L

FEATURES

- Excellent solderability by reflow soldering, flow soldering or soldering iron.
- Excellent for automatic insertion in the higher density circuit design.
- Resistant to external shocks and pressure.
- Highly reliable in wide temperature and humidity ranges. Excellent Q characteristics.
- Inductance of 1.0 to 47 nH (WIL0402), 1.6 to 270 nH (WIL0603), 2.8 to 820 nH (WIL0805) and 0.0047 to 8.2 μ H (WIL1008).
- Ideal application for radio, auto, telecommunications, tuners, instrumental and hybrid ICs.

DIMENSIONS

Unit : mm

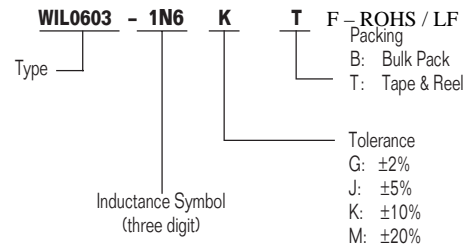
Type	A	B	C	D	E	F	G	H	I	J
WIL0402	1.27	0.76	0.61	0.15	0.51	0.23	0.56	0.66	0.50	0.46
WIL0603	1.80	1.12	1.02	0.38	0.76	0.33	0.86	1.02	0.64	0.64
WIL0805	2.29	1.73	1.52	0.51	1.27	0.51	1.02	1.78	1.02	0.76
WIL1008	2.92	2.79	2.03	0.51	2.03	0.51	1.52	2.54	1.02	1.27

TERMINAL WRAPAROUND:
Approx. 0.007" / 0.18 mm BOTH ENDS (0402 & 0603)
Approx. 0.015" / 0.38 mm BOTH ENDS (0805 & 1008)

CHARACTERISTICS

Temperature rise	20°C max.
Ambient temperature	80°C
Storage temperature	-40°C to + 100°C
Operating temperature	-20°C to + 100°C
Terminal tensile strength	1 kg min. (0.5kg for the WIL0402, WIL0603, WIL0805 & WIL1008)
Current rating	Value obtained when current flows and when temperature has risen to 20°C or value obtained when LC current flows and when the initial value of inductance has fallen by 10%, whichever smaller.
Resistance to soldering heat	260°C 10 seconds
Resistance to solvent	Conforms to MIL-STD-202E

ORDERING INFORMATION



TAPE PACKAGING

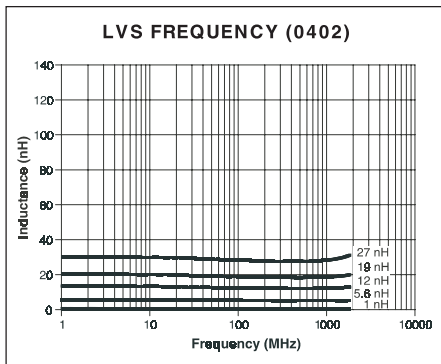
Size	Qty/Reel
WIL0402	4,000
WIL0603	2,000
WIL0805	2,000
WIL1008	2,000

HI-FREQUENCY WOUND INDUCTOR CHIPS — TYPE WIL

WIL0402 ELECTRICAL SPECIFICATIONS

SMEC Part No.	Inductance (nH)	Inductance Symbol	Q min.	L _r Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	I _{dc} (mA) max.
WIL0402-1N0JT	1.0	1N0	16	250	>6000	0.045	1360
WIL0402-2N0JT	2.0	2N0	16	250	>6000	0.070	1040
WIL0402-2N2JT	2.2	2N2	19	250	>6000	0.070	960
WIL0402-3N3JT	3.3	3N3	19	250	6000	0.066	840
WIL0402-3N6JT	3.6	3N6	19	250	6000	0.066	840
WIL0402-3N9JT	3.9	3N9	19	250	5800	0.066	840
WIL0402-5N1JT	5.1	5N1	20	250	5800	0.083	800
WIL0402-5N6JT	5.6	5N6	20	250	5800	0.083	760
WIL0402-6N2JT	6.2	6N2	20	250	5800	0.083	760
WIL0402-7N5JT	7.5	7N5	22	250	5800	0.104	680
WIL0402-8N2JT	8.2	8N2	22	250	4400	0.104	680
WIL0402-9N0JT	9.0	9N0	22	250	4160	0.104	680
WIL0402-10NJT	10	10N	21	250	3900	0.195	480
WIL0402-11NJT	11	11N	24	250	3680	0.120	640
WIL0402-12NJT	12	12N	24	250	3600	0.120	640
WIL0402-15NJT	15	15N	24	250	3280	0.172	560
WIL0402-19NJT	19	19N	24	250	3040	0.202	480
WIL0402-23NJT	23	23N	24	250	2720	0.214	400
WIL0402-27NJT	27	27N	24	250	2480	0.298	400
WIL0402-36NJT	36	36N	24	250	2320	0.403	320
WIL0402-40NJT	40	40N	24	250	2240	0.438	320
WIL0402-47NJT	47	47N	20	250	2100	0.830	150

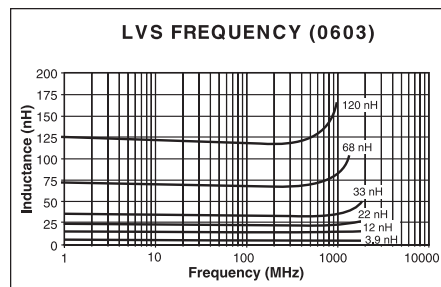
Inductance and Q are measured with a Q-meter.
Tolerances for this series are J: ±5, K: ±10%



WIL0603 ELECTRICAL SPECIFICATIONS

SMEC Part No.	Inductance (nH)	Inductance Symbol	Q min.	L _r Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	I _{dc} (mA) max.
WIL0603-1N6JT	1.6	1N6	24	250	12500	0.030	700
WIL0603-1N8JT	1.8	1N8	16	250	12500	0.045	700
WIL0603-3N3JT	3.3	3N3	22	250	5900	0.063	700
WIL0603-3N6JT	3.6	3N6	22	250	5900	0.063	700
WIL0603-3N9JT	3.9	3N9	22	250	6900	0.080	700
WIL0603-4N3JT	4.3	4N3	22	250	5900	0.063	700
WIL0603-4N7JT	4.7	4N7	20	250	5800	0.116	700
WIL0603-5N1JT	5.1	5N1	20	250	5700	0.140	700
WIL0603-6N3JT	6.3	6N3	20	250	5700	0.140	700
WIL0603-6N8JT	6.8	6N8	27	250	5800	0.110	700
WIL0603-7N5JT	7.5	7N5	28	250	4800	0.106	700
WIL0603-8N2JT	8.2	8N2	28	250	4700	0.109	700
WIL0603-8N7JT	8.7	8N7	28	250	4600	0.109	700
WIL0603-9N5JT	9.5	9N5	28	250	5400	0.135	700
WIL0603-10NJT	10	10N	31	250	4800	0.130	700
WIL0603-11NJT	11	11N	33	250	4000	0.086	700
WIL0603-12NJT	12	12N	35	250	4000	0.130	700
WIL0603-15NJT	15	15N	35	250	4000	0.170	700
WIL0603-16NJT	16	16N	34	250	3300	0.104	700
WIL0603-18NJT	18	18N	35	250	3100	0.170	700
WIL0603-22NJT	22	22N	38	250	3000	0.190	700
WIL0603-24NJT	24	24N	37	250	2650	0.135	700
WIL0603-27NJT	27	27N	40	250	2800	0.220	600
WIL0603-30NJT	30	30N	37	250	2250	0.144	600
WIL0603-33NJT	33	33N	40	250	2300	0.220	600
WIL0603-36NJT	36	36N	38	250	2080	0.250	600
WIL0603-39NJT	39	39N	40	250	2200	0.250	600
WIL0603-43NJT	43	43N	39	250	2000	0.280	600
WIL0603-47NJT	47	47N	38	200	2000	0.280	600
WIL0603-56NJT	56	56N	38	200	1900	0.310	600
WIL0603-68NJT	68	68N	37	200	1700	0.340	600
WIL0603-72NJT	72	72N	34	150	1700	0.490	400
WIL0603-82NJT	82	82N	34	150	1700	0.540	400
WIL0603-R10JT	100	R10	34	150	1400	0.580	400
WIL0603-R11JT	110	R11	32	150	1350	0.610	300
WIL0603-R12JT	120	R12	32	150	1300	0.650	300
WIL0603-R15JT	150	R15	28	150	990	0.920	280
WIL0603-R18JT	180	R18	25	100	990	1.250	240
WIL0603-R22JT	220	R22	25	100	900	2.100	200
WIL0603-R27JT	270	R27	24	100	900	2.300	170

Inductance and Q are measured with a Q-meter.
Tolerances for this series are G: ±2%, J: ±5%, K: ±10%, M: ±20%

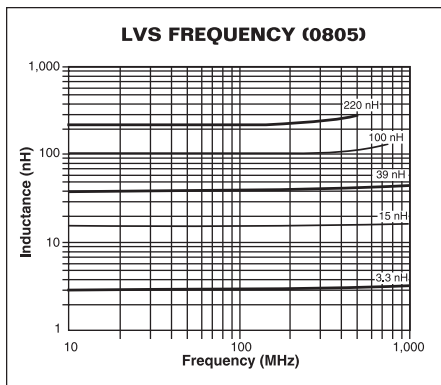


HI-FREQUENCY WOUND INDUCTOR CHIPS — TYPE WIL

WIL0805 ELECTRICAL SPECIFICATIONS

SMEC Part No.	Inductance (nH)	Inductance Symbol	Q min.	L,Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	Idc (mA) max.
WIL0805-2N8JT	2.8	2N8	70	1500	7900	0.06	800
WIL0805-3N0JT	3.0	3N0	65	1500	7900	0.06	800
WIL0805-3N3JT	3.3	3N3	50	1500	7900	0.08	600
WIL0805-5N6JT	5.6	5N6	65	1000	5500	0.08	600
WIL0805-6N8JT	6.8	6N8	50	1000	5500	0.11	600
WIL0805-7N5JT	7.5	7N5	50	1000	4500	0.14	600
WIL0805-8N2JT	8.2	8N2	50	1000	4700	0.12	600
WIL0805-10NJT	10	10N	60	500	4200	0.10	600
WIL0805-12NJT	12	12N	50	500	4000	0.15	600
WIL0805-15NJT	15	15N	50	500	3400	0.17	600
WIL0805-18NJT	18	18N	50	500	3300	0.20	600
WIL0805-22NJT	22	22N	55	500	2600	0.22	500
WIL0805-24NJT	24	24N	50	500	2000	0.22	500
WIL0805-27NJT	27	27N	55	500	2500	0.25	500
WIL0805-33NJT	33	33N	60	500	2050	0.27	500
WIL0805-36NJT	36	36N	55	500	1700	0.27	500
WIL0805-39NJT	39	39N	60	500	2000	0.29	500
WIL0805-43NJT	43	43N	60	500	1650	0.34	500
WIL0805-47NJT	47	47N	60	500	1650	0.31	500
WIL0805-56NJT	56	56N	60	500	1550	0.34	500
WIL0805-68NJT	68	68N	60	500	1450	0.38	500
WIL0805-82NJT	82	82N	65	500	1300	0.42	400
WIL0805-91NJT	91	91N	65	500	1200	0.48	400
WIL0805-R10JT	100	R10	65	500	1200	0.46	400
WIL0805-R11JT	110	R11	50	250	1000	0.48	400
WIL0805-R12JT	120	R12	50	250	1100	0.51	400
WIL0805-R15JT	150	R15	50	250	920	0.56	400
WIL0805-R18JT	180	R18	50	250	870	0.64	400
WIL0805-R20JT	200	R20	50	250	860	0.68	400
WIL0805-R22JT	220	R22	50	250	850	0.70	400
WIL0805-R24JT	240	R24	44	250	690	1.00	350
WIL0805-R25JT	250	R25	45	250	660	1.20	350
WIL0805-R27JT	270	R27	48	250	650	1.30	350
WIL0805-R33JT	330	R33	48	250	600	1.65	310
WIL0805-R39JT	390	R39	25	250	400	1.80	290
WIL0805-R47JT	470	R47	33	100	400	2.00	250
WIL0805-R56JT	560	R56	20	50	200	2.10	230
WIL0805-R62JT	620	R62	18	50	130	2.30	190
WIL0805-R68JT	680	R68	18	50	130	2.30	190
WIL0805-R82JT	820	R82	15	50	100	2.50	180

Inductance and Q are measured with a Q-meter.
Tolerances for this series are G: ±2%, J: ±5%, K: ±10%, M: ±20%



WIL1008 ELECTRICAL SPECIFICATIONS

SMEC Part No.	Inductance (μH)	Inductance Symbol	Q min.	L,Q test frequency (MHz)	Self resonant frequency (MHz) min.	DC resistance (Ω) max.	Idc (mA) max.
WIL1008-4N7JT	0.0047	4N7	50	500	4100	0.08	1000
WIL1008-5N6JT	0.0056	5N6	50	500	4100	0.15	1000
WIL1008-10NJT	0.010	10N	50	500	4100	0.08	1000
WIL1008-12NJT	0.012	12N	50	500	3300	0.09	1000
WIL1008-15NJT	0.015	15N	50	500	2500	0.10	1000
WIL1008-18NJT	0.018	18N	50	350	2500	0.11	1000
WIL1008-22NJT	0.022	22N	55	350	2400	0.12	1000
WIL1008-27NJT	0.027	27N	55	350	1600	0.13	1000
WIL1008-33NJT	0.033	33N	60	350	1600	0.14	1000
WIL1008-39NJT	0.039	39N	60	350	1500	0.15	1000
WIL1008-47NJT	0.047	47N	65	350	1500	0.16	1000
WIL1008-56NJT	0.056	56N	65	350	1300	0.18	1000
WIL1008-68NJT	0.068	68N	65	350	1300	0.20	1000
WIL1008-82NJT	0.082	82N	60	350	1000	0.22	1000
WIL1008-R10JT	0.10	R10	60	350	1000	0.56	650
WIL1008-R12JT	0.12	R12	60	350	950	0.63	650
WIL1008-R15JT	0.15	R15	45	100	850	0.70	580
WIL1008-R18JT	0.18	R18	45	100	750	0.77	620
WIL1008-R22JT	0.22	R22	45	100	700	0.84	500
WIL1008-R27JT	0.27	R27	45	100	600	0.91	500
WIL1008-R33JT	0.33	R33	45	100	570	1.05	450
WIL1008-R39JT	0.39	R39	45	100	500	1.12	470
WIL1008-R47JT	0.47	R47	45	100	450	1.19	470
WIL1008-R56JT	0.56	R56	45	100	415	1.33	400
WIL1008-R62JT	0.62	R62	45	100	375	1.40	300
WIL1008-R68JT	0.68	R68	45	100	375	1.47	400
WIL1008-R75JT	0.75	R75	45	100	360	1.54	360
WIL1008-R82JT	0.82	R82	45	100	350	1.61	400
WIL1008-R91JT	0.91	R91	35	50	320	1.68	380
WIL1008-1R0JT	1.0	1R0	35	50	220	1.75	370
WIL1008-1R2JT	1.2	1R2	35	50	186	2.0	310
WIL1008-1R5JT	1.5	1R5	28	50	200	2.3	330
WIL1008-1R8JT	1.8	1R8	25	50	170	2.6	300
WIL1008-2R2JT	2.2	2R2	20	50	110	2.8	280
WIL1008-2R7JT	2.7	2R7	15	25	140	3.2	290
WIL1008-3R3JT	3.3	3R3	15	25	100	3.4	290
WIL1008-3R9JT	3.9	3R9	15	25	100	3.6	260
WIL1008-4R7JT	4.7	4R7	13	25	90	4.0	260
WIL1008-5R6JT	5.6	5R6	16	7.9	20	4.0	240
WIL1008-6R8JT	6.8	6R8	18	7.9	40	4.9	200
WIL1008-8R2JT	8.2	8R2	18	7.9	25	6.0	170

Inductance and Q are measured with a Q-meter.
Tolerances for this series are G: ±2%, J: ±5%, K: ±10%

