

## 1. WTI Series (Ceramic Type)

### (b). UV glue cover type (Size: 0402(1005)~1008(2520))

Range of Size: (0402(1005)~1008(2520))

Test Equipment: **HP4286, 4287A & 4291B** - For "Inductance" & "Q"

**HP4287A & 8753E** - For "SRF"

**HP4287A, GOM-801G & 502BC** - For "DCR"

Operating Temperature: -40 ~+125

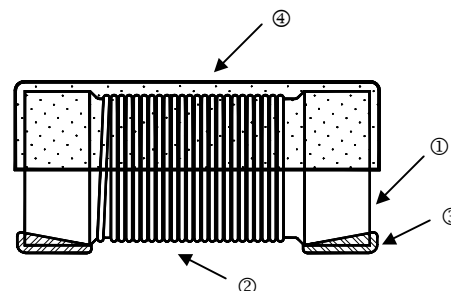


### Applications

- > Cordless (DECT/CT1CT2) & Cellular (CDMA/GSM/PHS) Phone.
- > Remote control, wireless security system.
- > WLL, Wireless LAN / Mouse / Keyboard / Earphone.
- > GPS receiver.
- > VCO, RF Module & other wireless products.
- > CATV Filter, Tuner.
- > Cable Modem / XDSL Tuner.
- > Set Top Box.

### Features

- > Wirewound ceramic construction provide high SRF.
- > Ultra compact inductors provide exceptional Q values.
- > Low Profile, high Q are available.
- > Outstanding endurance from Pull-up force, mechanical shock and pressure.
- > Smaller size of 0402(1005) & tighter tolerance down to +/- 2%.

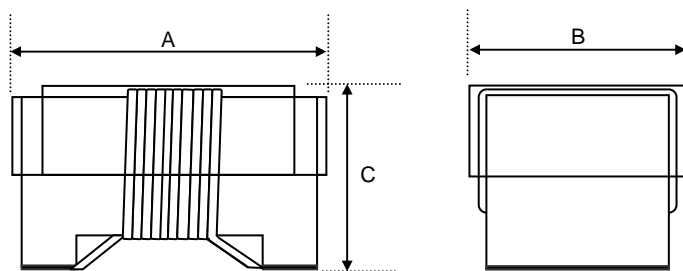


### Construction

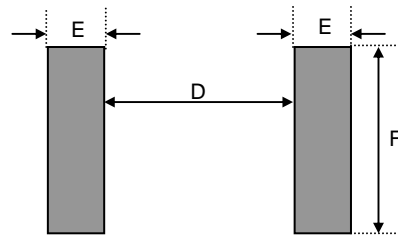
1. Ceramic Core
2. Wire
3. Electrode
4. UV Glue

### General Dimensions and Configuration

#### SHAPE:



#### PCB PATTERN



#### DIMENSIONS:

SERIES	A (m/m) (Max.)	B (m/m) (Max.)	C (m/m) (Max.)	D (m/m)	E (m/m)	F (m/m)
WTI-0402C	1.27	0.76	0.61	0.46	0.50	0.66
WTI-0603C	1.80	1.12	1.02	0.64	0.64	1.02
WTI-0805C	2.29	1.73	1.52	0.76	1.02	1.78
WTI-1008C	2.92	2.79	2.03	1.27	1.27	2.54

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**Inductance, SRF, Q and Rated Current ranges**

SERIES	Inductance (nH)	SRF (Min.) (GHz)	Q (Min.)	I (Rated) (mA)
WTI-0402C	1.00~68	12.700~1.620	15~25	1360~100
WTI-0603C	1.60~390	12.500~0.900	16~40	700~100
WTI-0805C	2.70~4700	7.900~0.188	15~65	600~90
WTI-1008C	10.00~3900	4.100~0.100	20~65	1000~260

**Color Coding**

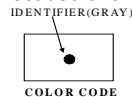
Color	Figures	Multiplier
Black	0	1
Brown	1	10
Red	2	100
Orange	3	1000
Yellow	4	10000
Green	5	-
Blue	6	-
Violet	7	-
Gray	8	-
White	9	-

**WTI-0402C Series**

No Color Coding

**WTI-0603C, WTI-0805C Series**

Because of small size, these parts are marked with a single color dot.

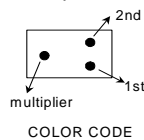


Ex : **WTI-0805C-33NJ**

**MARKING : GRAY**

**WTI-1008C Series**

These parts are marked with 3 color dots.



Ex : **WTI-1008C-10NJ**

**MARKING : Dots 1 and 2 indicate the inductance in nano Henries.**

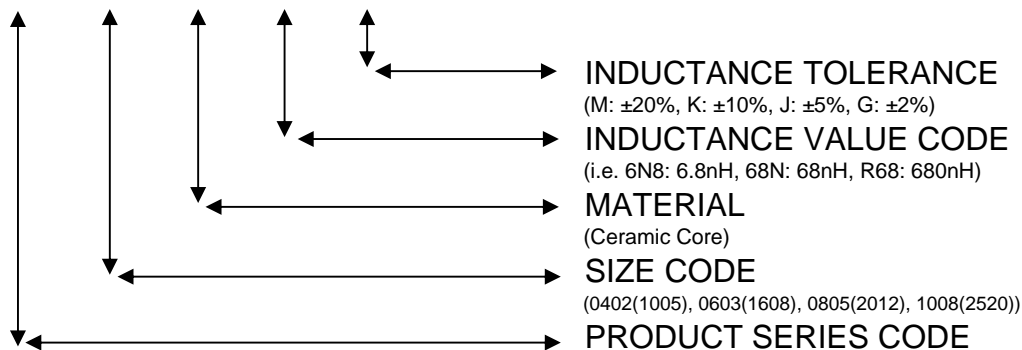
**(DOT 1 : BROWN , DOT 2 : BLACK)**

**MARKING : Dot 3 indicates number of zeroes to be added.**

**(DOT 3 : BLACK)**

**Part Numbering Systems**

**WTI- 0402 C - 68N J**



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### Electrical Characteristics

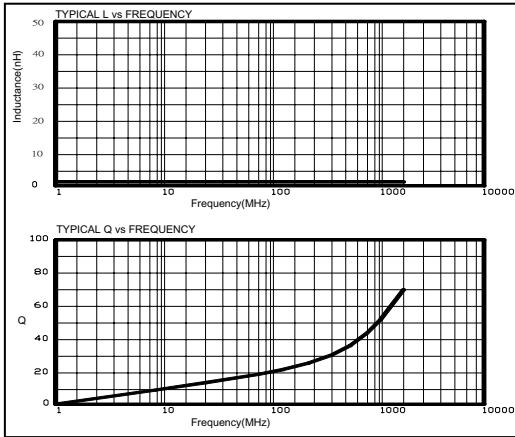
#### **WTI-0402C Series Wire Wound Chip Inductors / UV Glue Cover Type**

Part No.	L (nH) @ _MHz	Inductance Tolerance	Q (Min.) @ _MHz	SRF (Min.) (GHz)	DCR $\Omega$ (Max.)	Rated Current (mA)	900MHz		1.7GHz	
							L	Q	L	Q
WTI-0402C-1N0	1.0 @ 250	K	16 @ 250	12.70	0.045	1360	1.02	77	1.02	69
WTI-0402C-1N9	1.9 @ 250	K	16 @ 250	11.30	0.070	1040	1.72	68	1.74	82
WTI-0402C-2N0	2.0 @ 250	K	16 @ 250	11.10	0.070	1040	1.93	54	1.93	75
WTI-0402C-2N2	2.2 @ 250	K	19 @ 250	10.80	0.070	960	2.19	59	2.23	100
WTI-0402C-2N4	2.4 @ 250	K	15 @ 250	10.50	0.070	790	2.24	51	2.27	68
WTI-0402C-2N7	2.7 @ 250	K	16 @ 250	10.40	0.120	640	2.23	42	2.25	61
WTI-0402C-3N3	3.3 @ 250	K	19 @ 250	7.00	0.066	840	3.10	65	3.12	87
WTI-0402C-3N6	3.6 @ 250	K, J	19 @ 250	6.80	0.066	840	3.56	45	3.62	71
WTI-0402C-3N9	3.9 @ 250	K, J	19 @ 250	5.80	0.066	840	3.89	50	4.00	75
WTI-0402C-4N3	4.3 @ 250	K, J	18 @ 250	6.00	0.091	700	4.19	47	4.30	71
WTI-0402C-4N7	4.7 @ 250	K, J	18 @ 250	4.70	0.130	640	4.55	48	4.68	68
WTI-0402C-5N1	5.1 @ 250	K, J	20 @ 250	4.80	0.083	800	5.15	56	5.25	82
WTI-0402C-5N6	5.6 @ 250	K, J	20 @ 250	4.80	0.083	760	5.16	54	5.28	81
WTI-0402C-6N2	6.2 @ 250	K, J	20 @ 250	4.80	0.083	760	6.16	52	6.37	76
WTI-0402C-6N8	6.8 @ 250	K, J	20 @ 250	4.80	0.083	680	6.56	63	6.93	78
WTI-0402C-7N5	7.5 @ 250	K, J	22 @ 250	4.80	0.104	680	7.91	60	8.22	88
WTI-0402C-8N2	8.2 @ 250	K, J	22 @ 250	4.40	0.104	680	8.50	57	8.85	84
WTI-0402C-8N7	8.7 @ 250	K, J	18 @ 250	4.10	0.200	480	8.78	54	9.21	73
WTI-0402C-9N0	9.0 @ 250	K, J	22 @ 250	4.16	0.104	680	9.07	62	9.53	78
WTI-0402C-9N5	9.5 @ 250	K, J	18 @ 250	4.00	0.200	480	9.42	54	9.98	69
WTI-0402C-10N	10 @ 250	K, J, G	21 @ 250	3.90	0.195	480	9.80	50	10.10	67
WTI-0402C-11N	11 @ 250	K, J, G	24 @ 250	3.68	0.120	640	10.70	52	11.20	78
WTI-0402C-12N	12 @ 250	K, J, G	24 @ 250	3.60	0.120	640	11.90	53	12.70	71
WTI-0402C-13N	13 @ 250	K, J, G	24 @ 250	3.45	0.210	440	13.40	51	14.60	57
WTI-0402C-15N	15 @ 250	K, J, G	24 @ 250	3.28	0.172	560	14.60	55	15.50	77
WTI-0402C-16N	16 @ 250	K, J, G	24 @ 250	3.10	0.220	560	16.60	46	18.80	47
WTI-0402C-18N	18 @ 250	K, J, G	25 @ 250	3.10	0.230	420	18.30	57	20.30	62
WTI-0402C-19N	19 @ 250	K, J, G	24 @ 250	3.04	0.202	480	19.10	50	21.10	67
WTI-0402C-20N	20 @ 250	K, J, G	25 @ 250	3.00	0.250	420	20.70	52	23.70	53
WTI-0402C-22N	22 @ 250	K, J, G	25 @ 250	2.80	0.300	400	23.20	53	26.80	53
WTI-0402C-23N	23 @ 250	K, J, G	24 @ 250	2.72	0.300	400	23.80	49	26.90	64
WTI-0402C-24N	24 @ 250	K, J, G	25 @ 250	2.70	0.300	400	25.10	51	29.50	50
WTI-0402C-27N	27 @ 250	K, J, G	24 @ 250	2.48	0.300	400	28.70	49	33.50	63
WTI-0402C-30N	30 @ 250	K, J, G	25 @ 250	2.35	0.350	400	31.10	46	38.50	39
WTI-0402C-33N	33 @ 250	K, J, G	24 @ 250	2.35	0.350	400	34.90	31	41.70	32
WTI-0402C-36N	36 @ 250	K, J, G	24 @ 250	2.32	0.440	320	39.50	44	48.40	53
WTI-0402C-39N	39 @ 250	K, J, G	25 @ 250	2.10	0.550	200	41.70	47	50.20	45
WTI-0402C-40N	40 @ 250	K, J, G	24 @ 250	2.24	0.500	320	39.00	44	47.40	33
WTI-0402C-43N	43 @ 250	K, J, G	25 @ 250	2.03	0.810	100	45.80	46	61.60	34
WTI-0402C-47N	47 @ 250	K, J, G	25 @ 250	2.10	0.830	150	50.00	38	55.80	37
WTI-0402C-51N	51 @ 250	K, J, G	25 @ 250	1.75	0.820	100	50.40	47	59.40	37
WTI-0402C-56N	56 @ 250	K, J, G	25 @ 250	1.76	0.970	100	57.40	49	72.40	40
WTI-0402C-68N	68 @ 250	K, J, G	22 @ 250	1.62	1.120	100	69.60	45	83.40	38

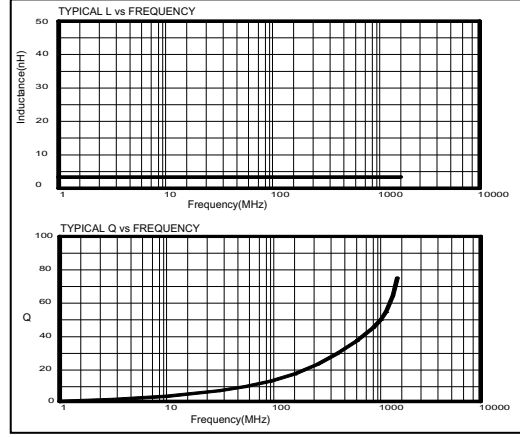
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**Rating Curves**

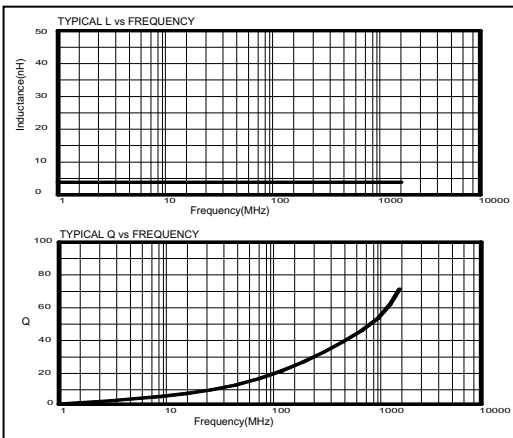
**WTI-0402C-1N0J**



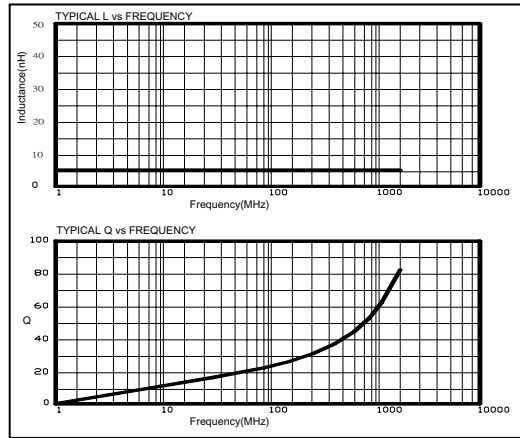
**WTI-0402C-3N3J**



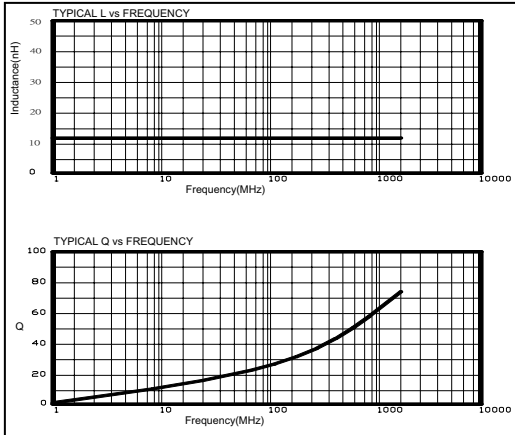
**WTI-0402C-3N9J**



**WTI-0402C-5N6J**



**WTI-0402C-12NJ**



**WTI-0402C-19NJ**

