

## 2. WUI Series (Ferrite Type)

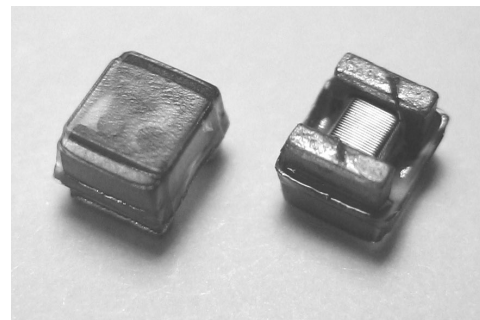
Range of Size: (0603(1608)~1008(2520))

Test Equipment: **HP4291 or HP4284** - Inductance & Q measurement

**HP4291** - SRF measurement

**Agilent 34401A** - DCR measurement

Operating Temperature: -40 ~+85



### Applications

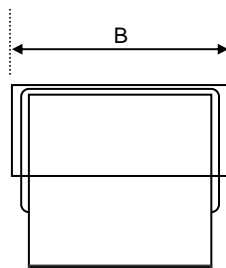
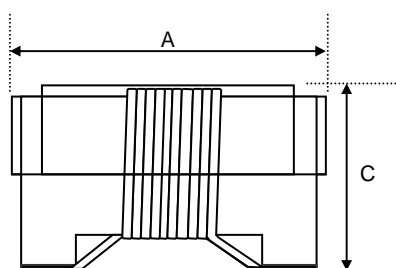
- > Cordless (DECT/CT1CT2) & Cellular (CDMA/GSM/PHS) Phone.
- > Remote control, wireless security system.
- > WLL, Wireless LAN / Mouse / Keyboard / Earphone.
- > Liquid Crystal Televisions.
- > VCO, RF Module & other wireless products.
- > CATV Filter, Tuner.
- > Cable Modem / XDSL Tuner.

### Features

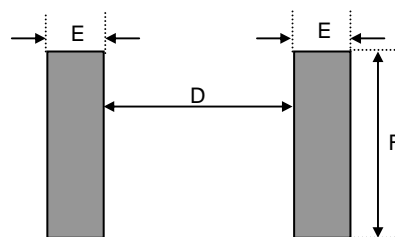
- > Wirewound ferrite construction provide high SRF.
- > Ultra compact inductors provide exceptional Q values.
- > Highly reliable in environments of sudden temperature change and humidity.
- > Low Profile, high current are available.
- > Outstanding endurance from Pull-up force, mechanical shock and pressure.

### 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)
WUI-0603F	1.80	1.20	1.00	0.64	0.64	1.02
WUI-0805F	2.40	1.71	1.45	0.76	1.02	1.78
WUI-1008F	2.92	2.79	2.10	1.27	1.02	2.54
WUI-0603CF	1.80	1.20	1.10	0.64	0.64	1.02
WUI-0805CF	2.40	1.71	1.45	0.76	1.02	1.78
WUI-1008CF	2.92	2.79	2.10	1.27	1.02	2.54

## 2. WUI Series (Ferrite Type)

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Operating Temperature: -40 ~+85

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

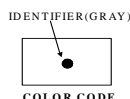
SERIES	Inductance (μH)	SRF (Min.) (MHz)	Q (Min.)	I (Rated) (mA)
WUI-0603F	0.270~47.00	900~11	12~16	950~100
WUI-0805F	0.100~82.00	1400~5	10~30	1700~60
WUI-1008F	0.100~100.00	930~7	8~30	1300~200
WUI-0603CF	0.047~15.00	2000~25	7~15	2200~240
WUI-0805CF	0.100~220.00	1700~4	8~15	2400~70
WUI-1008CF	0.100~330.00	1500~2	13~35	3200~130

### 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	-

#### WUI-0603F, WUI-0805F, WUI-0603CF, WUI-0805CF Series

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

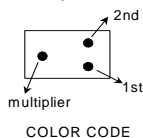


Ex : WUI-0805F-390J

MARKING : GRAY

#### WUI-1008F, WUI-1008CF Series

These parts are marked with 3 color dots.



Ex : WUI-1008F-1R0J

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

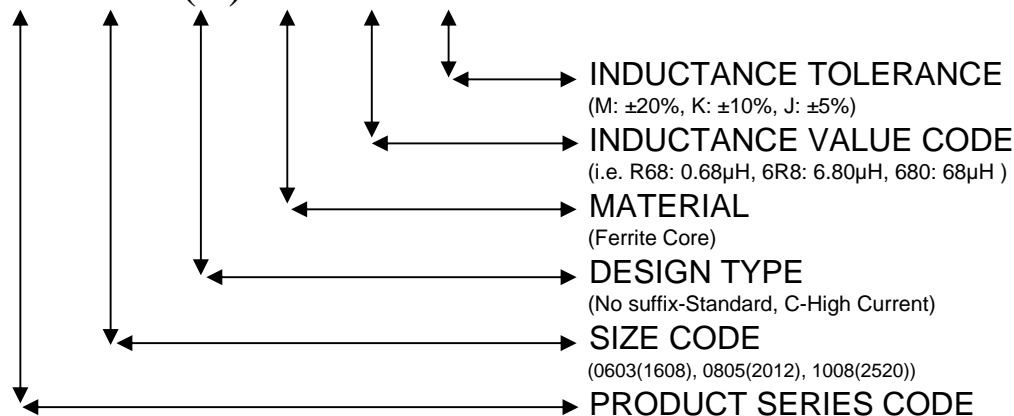
(DOT 1 : BROWN , DOT 2 : BLACK)

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

(DOT 3 : RED)

### Part Numbering Systems

WUI-0805(C) F - 6R8 K



## ***(IV) WIRE WOUND CHIP INDUCTORS***

Tri-Tron

### **2(b). WUI Series (High Current Type) (Size: 0603 (1608))**

#### **Electrical Characteristics**

##### **WUI-0603CF Series Ferrite Wire Wound Chip Inductors / High Current Type**

Part Number	Inductance ( $\mu$ H) @_MHz	Tolerance	Q Min. @_MHz	SRF (MHz) Min.	DCR ( ) Max.	IDC (mA) Max.	Color Code
WUI-0603CF-47N	0.047 @7.96	J,K	12 @7.96	2000	0.075	1800	White
WUI-0603CF-51N	0.051 @7.96	J,K	12 @7.96	1500	0.075	1800	Violet
WUI-0603CF-56N	0.056 @7.96	J,K	7 @7.96	1500	0.095	2200	Blue
WUI-0603CF-68N	0.068 @7.96	J,K	10 @7.96	1500	0.12	2200	Gray
WUI-0603CF-72N	0.072 @7.96	J,K	12 @7.96	1500	0.12	2200	Brown
WUI-0603CF-R10	0.10 @7.96	J,K	12 @7.96	1150	0.13	2200	Black
WUI-0603CF-R12	0.12 @7.96	J,K	12 @7.96	1100	0.15	1900	Orange
WUI-0603CF-R15	0.15 @7.96	J,K	15 @7.96	1050	0.15	1800	Brown
WUI-0603CF-R18	0.18 @7.96	J,K	15 @7.96	950	0.15	1800	Green
WUI-0603CF-R22	0.22 @7.96	J,K	15 @7.96	900	0.30	1300	Red
WUI-0603CF-R24	0.24 @7.96	J,K	15 @7.96	850	0.16	1700	Green
WUI-0603CF-R27	0.27 @7.96	J,K	15 @7.96	835	0.30	1400	Yellow
WUI-0603CF-R33	0.33 @7.96	J,K	15 @7.96	725	0.40	1300	Orange
WUI-0603CF-R36	0.36 @7.96	J,K	15 @7.96	720	0.41	1300	Green
WUI-0603CF-R39	0.39 @7.96	J,K	15 @7.96	680	0.41	1200	Blue
WUI-0603CF-R47	0.47 @7.96	J,K	15 @7.96	640	0.43	1200	Black
WUI-0603CF-R56	0.56 @7.96	J,K	15 @7.96	630	0.44	1200	Brown
WUI-0603CF-R65	0.65 @7.96	J,K	15 @7.96	510	0.52	1000	Blue
WUI-0603CF-R68	0.68 @7.96	J,K	15 @7.96	510	0.52	1000	Red
WUI-0603CF-R78	0.78 @7.96	J,K	15 @7.96	465	0.63	990	Orange
WUI-0603CF-R82	0.82 @7.96	J,K	15 @7.96	460	0.69	990	Yellow
WUI-0603CF-R90	0.90 @7.96	J,K	15 @7.96	350	0.81	950	Black
WUI-0603CF-1R0	1.0 @7.96	J,K	15 @7.96	320	0.81	850	Green
WUI-0603CF-1R2	1.2 @7.96	J,K	15 @7.96	270	0.87	850	Blue
WUI-0603CF-1R5	1.5 @7.96	J,K	15 @7.96	230	0.96	830	Violet
WUI-0603CF-1R8	1.8 @7.96	J,K	15 @7.96	210	1.10	820	Gray
WUI-0603CF-2R2	2.2 @7.96	J,K	15 @7.96	115	1.20	720	White
WUI-0603CF-2R7	2.7 @7.96	J,K	15 @7.96	100	1.38	700	Black
WUI-0603CF-3R0	3.0 @7.96	J,K	15 @7.96	90	1.45	680	Black
WUI-0603CF-3R3	3.3 @7.96	J,K	15 @7.96	84	1.50	640	Brown
WUI-0603CF-3R9	3.9 @7.96	J,K	15 @7.96	75	1.50	630	Red
WUI-0603CF-4R7	4.7 @7.96	J,K	15 @7.96	67	2.10	530	Orange
WUI-0603CF-5R6	5.6 @7.96	J,K	15 @7.96	55	2.37	510	Yellow
WUI-0603CF-6R8	6.8 @7.96	J,K	15 @7.96	48	3.10	490	Green
WUI-0603CF-7R8	7.8 @7.96	J,K	15 @7.96	40	3.35	420	Blue
WUI-0603CF-8R2	8.2 @7.96	J,K	15 @7.96	38	3.50	450	Violet
WUI-0603CF-100	10 @7.96	J,K	15 @7.96	32	4.46	370	Gray
WUI-0603CF-150	15 @7.96	J,K	14 @7.96	25	9.50	240	White

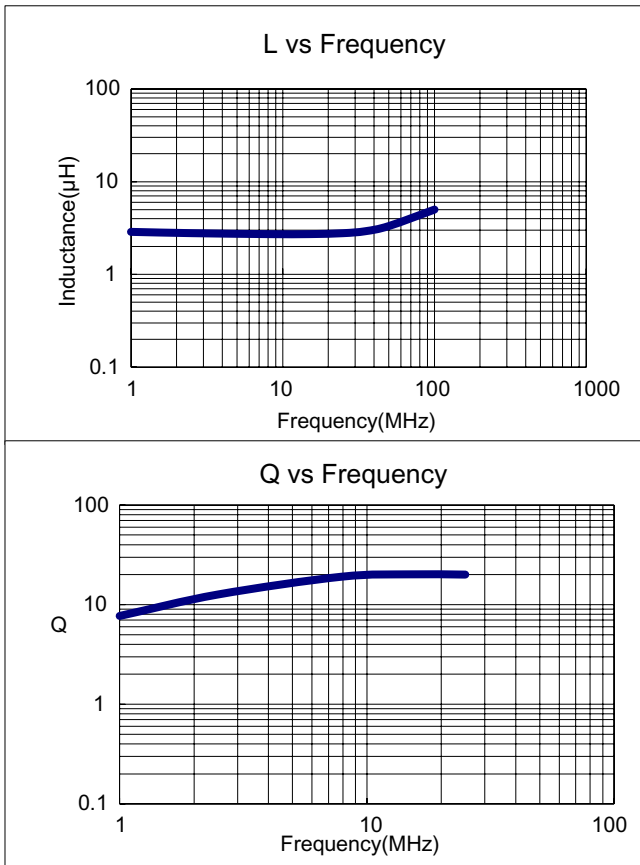
Remarks:

1. Rated current: Applied the current to coils, the inductance change should be less than 10% to initial value.
2. Measurement of L, Q : HP4291

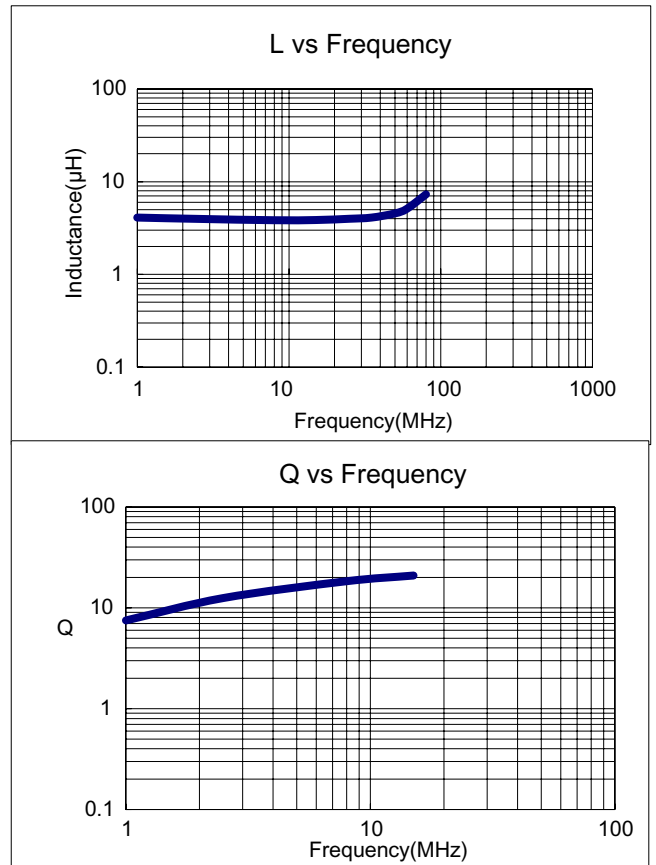
2(b). WUI Series (High Current Type) (Size: 0603 (1608))

Rating Curves

**WUI-0603CF-2R7K**



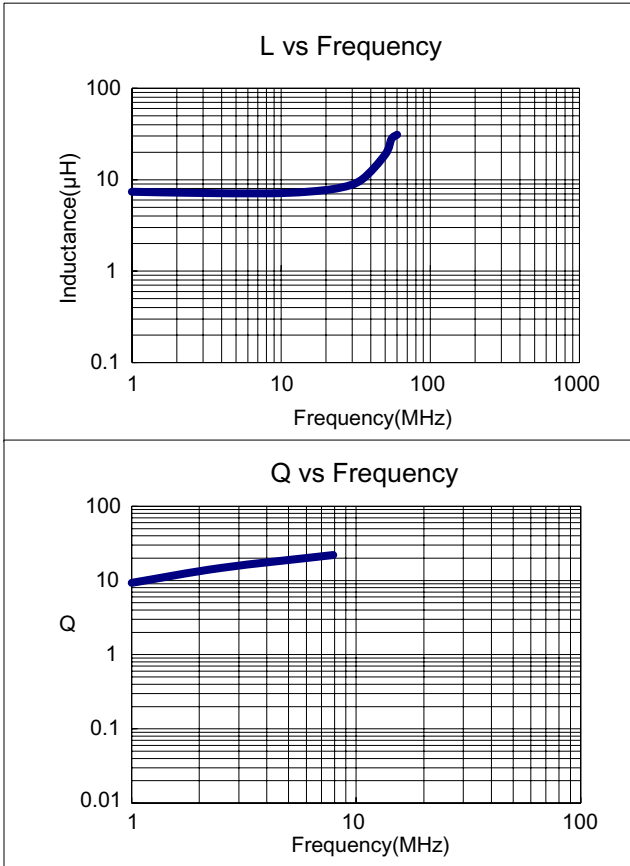
**WUI-0603CF-3R9K**



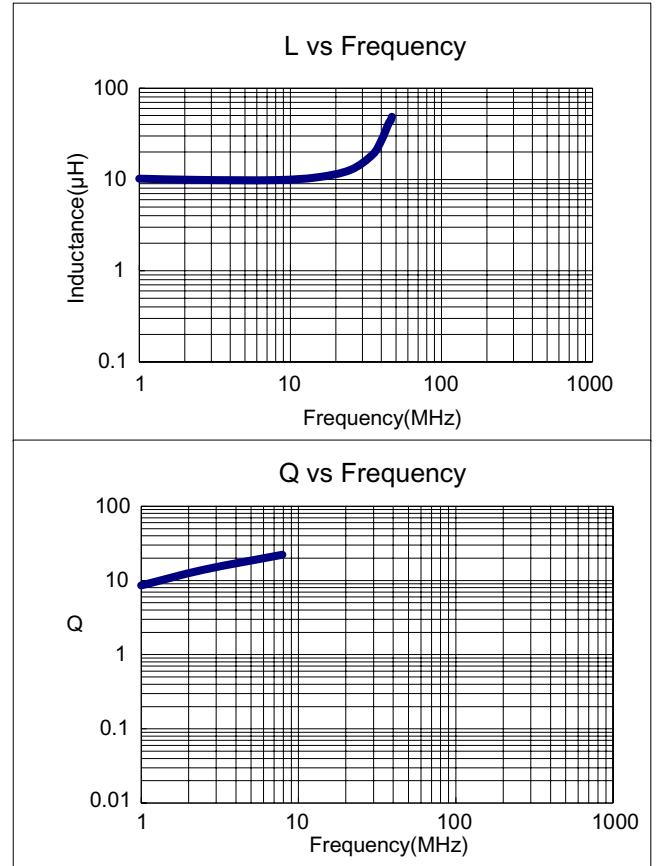
2(b). WUI Series (High Current Type) (Size: 0603 (1608))

Rating Curves (Cont'd)

**WUI-0603CF-6R8K**



**WUI-0603CF-100K**



## (IV) WIRE WOUND CHIP INDUCTORS

Tri-Tron

### 2(b). WUI Series (High Current Type) (Size: 0805 (2012))

#### Electrical Characteristics

##### WUI-0805CF Series Ferrite Wire Wound Chip Inductors / High Current Type

Part Number	Inductance ( $\mu$ H) @_MHz	Tolerance	Q Typ. @_MHz	SRF (MHz) Min.	DCR ( ) Max.	IDC (mA) Max.	Color Code
WUI-0805CF-R10	0.10 @25.2	K,M	9 @7.96	1700	0.091	2400	Black
WUI-0805CF-R15	0.15 @25.2	K,M	12 @7.96	1500	0.104	1900	Brown
WUI-0805CF-R22	0.22 @25.2	K,M	12 @7.96	1500	0.130	1700	Red
WUI-0805CF-R33	0.33 @25.2	K,M	12 @7.96	900	0.156	1400	Orange
WUI-0805CF-R47	0.47 @25.2	K,M	14 @7.96	850	0.156	1400	Blue
WUI-0805CF-R56	0.56 @25.2	K,M	14 @7.96	360	0.195	1200	Violet
WUI-0805CF-R68	0.68 @25.2	K,M	14 @7.96	290	0.195	1200	Gray
WUI-0805CF-R82	0.82 @25.2	K,M	14 @7.96	208	0.195	1100	White
WUI-0805CF-1R0	1.0 @7.96	K,M	14 @7.96	208	0.169	1100	Black
WUI-0805CF-1R2	1.2 @7.96	K,M	14 @7.96	159	0.208	960	Red
WUI-0805CF-1R5	1.5 @7.96	K,M	14 @7.96	159	0.221	920	Brown
WUI-0805CF-1R8	1.8 @7.96	K,M	14 @7.96	112	0.260	860	Orange
WUI-0805CF-2R2	2.2 @7.96	K,M	13 @7.96	87	0.286	740	Red
WUI-0805CF-2R7	2.7 @7.96	K,M	13 @7.96	72	0.325	680	Yellow
WUI-0805CF-3R3	3.3 @7.96	K,M	12 @7.96	70	0.364	620	Orange
WUI-0805CF-3R9	3.9 @7.96	K,M	14 @7.96	61	0.494	580	Green
WUI-0805CF-4R7	4.7 @7.96	K,M	14 @7.96	51	0.559	520	Yellow
WUI-0805CF-5R6	5.6 @7.96	K,M	12 @7.96	47	0.650	480	Blue
WUI-0805CF-6R8	6.8 @7.96	K,M	14 @7.96	46	0.884	420	Green
WUI-0805CF-8R2	8.2 @7.96	K,M	13 @7.96	33	0.949	400	Violet
WUI-0805CF-100	10 @2.52	J,K,M	14 @2.52	31	1.105	360	Blue
WUI-0805CF-120	12 @2.52	J,K,M	14 @2.52	30	1.170	340	Gray
WUI-0805CF-150	15 @2.52	J,K,M	15 @2.52	28	1.820	300	Violet
WUI-0805CF-180	18 @2.52	J,K,M	15 @2.52	27	2.010	280	White
WUI-0805CF-220	22 @2.52	J,K,M	15 @2.52	20	2.288	240	Gray
WUI-0805CF-270	27 @2.52	J,K,M	15 @2.52	17	2.600	220	Black
WUI-0805CF-330	33 @2.52	J,K,M	15 @2.52	17	3.055	200	White
WUI-0805CF-390	39 @2.52	J,K,M	14 @2.52	15	4.355	180	Brown
WUI-0805CF-470	47 @2.52	J,K,M	14 @2.52	15	4.420	160	Black
WUI-0805CF-560	56 @2.52	J,K,M	14 @2.52	10	5.746	150	Yellow
WUI-0805CF-680	68 @2.52	J,K,M	14 @2.52	10	5.785	140	Brown
WUI-0805CF-820	82 @2.52	J,K,M	14 @2.52	10	9.750	100	Orange
WUI-0805CF-101	100 @1.00	J,K,M	10 @1.00	9	9.750	100	Red
WUI-0805CF-221	220 @1.00	J,K,M	8 @1.00	4	30.030	70	Blue

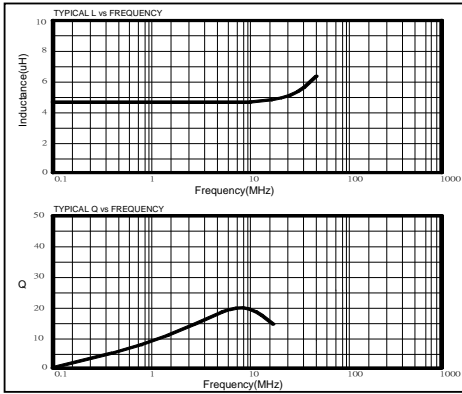
#### Remarks:

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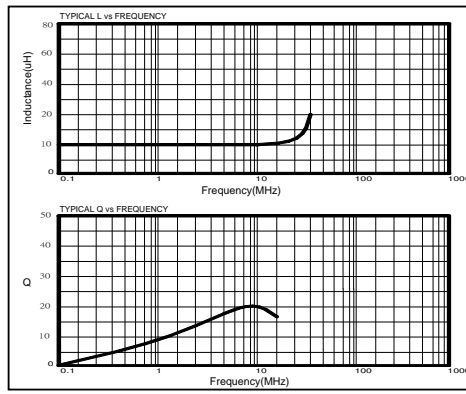
**2(b). WUI Series (High Current Type) (Size: 0805 (2012))**

**Rating Curves**

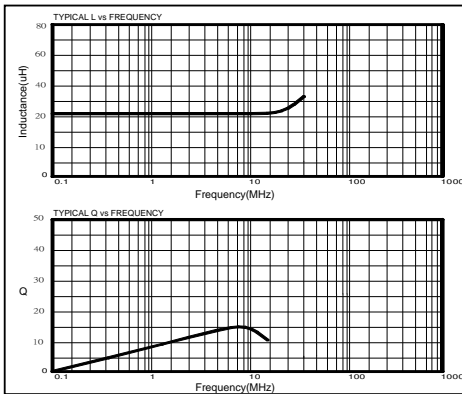
**WUI-0805CF-4R7K**



**WUI-0805CF-100K**



**WUI-0805CF-220K**



## (IV) WIRE WOUND CHIP INDUCTORS

Tri-Tron

### 2(b). WUI Series (High Current Type) (Size: 1008 (2520))

#### Electrical Characteristics

##### WUI-1008CF Series Ferrite Wire Wound Chip Inductors / High Current Type

Part Number	Inductance ( $\mu$ H) @_MHz	Tolerance	Q Typ. @_MHz	SRF (MHz) Min.	DCR ( ) Max.	IDC (mA) Max.	Color Code		
							1st	2nd	multiplier
WUI-1008CF-R10	0.10 @25.2	J,K	35 @25.2	1500	0.05	3200	Brown	Red	Brown
WUI-1008CF-R22	0.22 @25.2	J,K	35 @25.2	800	0.15	2900	Red	Red	Brown
WUI-1008CF-R39	0.39 @25.2	J,K	35 @25.2	460	0.20	2100	Orange	White	Brown
WUI-1008CF-R47	0.47 @25.2	J,K	35 @25.2	460	0.20	2100	Yellow	Violet	Brown
WUI-1008CF-R56	0.56 @25.2	J,K	35 @25.2	360	0.26	1800	Green	Blue	Brown
WUI-1008CF-R68	0.68 @25.2	J,K	35 @25.2	400	0.30	1700	Blue	Gray	Brown
WUI-1008CF-R82	0.82 @25.2	J,K	35 @25.2	360	0.35	1400	Gray	Red	Brown
WUI-1008CF-1R0	1.0 @7.96	J,K	32 @7.96	340	0.34	1700	Brown	Black	Red
WUI-1008CF-1R1	1.1 @7.96	J,K	25 @7.96	300	0.34	1500	Brown	Brown	Red
WUI-1008CF-1R2	1.2 @7.96	J,K	25 @7.96	300	0.25	1600	Brown	Red	Red
WUI-1008CF-1R5	1.5 @7.96	J,K	32 @7.96	230	0.42	1200	Brown	Green	Red
WUI-1008CF-1R8	1.8 @7.96	J,K	27 @7.96	180	0.45	1100	Brown	Gray	Red
WUI-1008CF-2R2	2.2 @7.96	J,K	27 @7.96	140	0.50	1100	Red	Red	Red
WUI-1008CF-2R7	2.7 @7.96	J,K	27 @7.96	130	0.55	1000	Red	Violet	Red
WUI-1008CF-3R3	3.3 @7.96	J,K	27 @7.96	125	0.60	1000	Orange	Orange	Red
WUI-1008CF-3R9	3.9 @7.96	J,K	27 @7.96	100	0.80	990	Orange	White	Red
WUI-1008CF-4R7	4.7 @7.96	J,K	30 @7.96	90	0.90	880	Yellow	Violet	Red
WUI-1008CF-5R6	5.6 @7.96	J,K	27 @7.96	60	1.00	850	Green	Blue	Red
WUI-1008CF-6R8	6.8 @7.96	J,K	27 @7.96	60	1.05	840	Blue	Gray	Red
WUI-1008CF-8R2	8.2 @7.96	J,K	25 @7.96	55	1.20	810	Gray	Red	Red
WUI-1008CF-100	10 @2.52	J,K	23 @2.52	55	1.55	700	Brown	Black	Orange
WUI-1008CF-120	12 @2.52	J,K	23 @2.52	36	2.10	580	Brown	Red	Orange
WUI-1008CF-150	15 @2.52	J,K	23 @2.52	36	2.38	580	Brown	Green	Orange
WUI-1008CF-180	18 @2.52	J,K	23 @2.52	32	2.50	520	Brown	Gray	Orange
WUI-1008CF-220	22 @2.52	J,K	23 @2.52	29	2.92	500	Red	Red	Orange
WUI-1008CF-270	27 @2.52	J,K	23 @2.52	22	3.70	450	Red	Violet	Orange
WUI-1008CF-330	33 @2.52	J,K	23 @2.52	21	4.10	420	Orange	Orange	Orange
WUI-1008CF-390	39 @2.52	J,K	18 @2.52	15	5.50	340	Orange	White	Orange
WUI-1008CF-470	47 @2.52	J,K	23 @2.52	17	7.80	310	Yellow	Violet	Orange
WUI-1008CF-680	68 @2.52	J,K	20 @2.52	9	11.50	220	Blue	Gray	Orange
WUI-1008CF-101	100 @1.00	J,K	13 @1.00	4	13.2	210	Brown	Black	Yellow
WUI-1008CF-151	150 @1.00	J,K	13 @1.00	3	22.5	170	Brown	Green	Yellow
WUI-1008CF-221	220 @1.00	J,K	13 @1.00	3	26.5	160	Red	Red	Yellow
WUI-1008CF-271	270 @1.00	J,K	13 @1.00	2	32.0	135	Red	Violet	Yellow
WUI-1008CF-331	330 @1.00	J,K	13 @1.00	2	32.5	130	Orange	Orange	Yellow

#### Remarks:

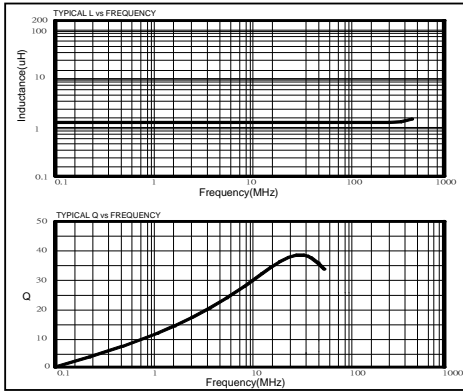
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2. Measurement of L, Q : HP4291



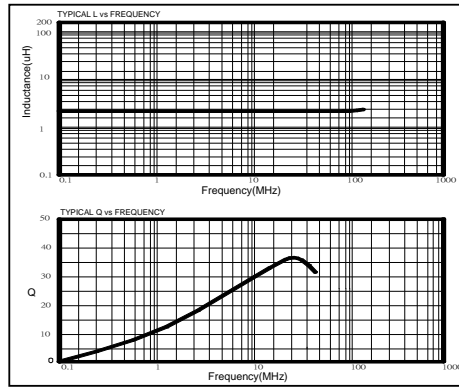
**2(b). WUI Series (High Current Type) (Size: 1008 (2520))**

**Rating Curves**

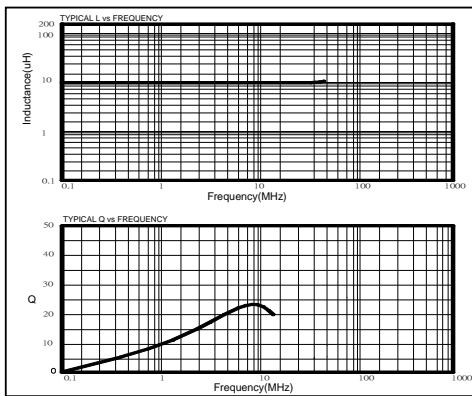
**WUI-1008CF-1R5K**



**WUI-1008CF-2R7K**



**WUI-1008CF-100K**



**WUI-1008CF-330K**

