

## 2. WUI Series (Ferrite Type)

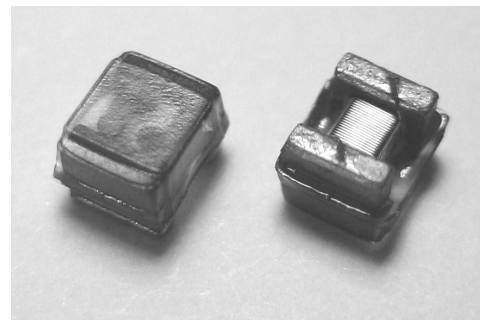
Range of Size: (0603(1608)~1008(2520))

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

**HP4291** - SRF measurement

**Agilent 34401A** - DCR measurement

Operating Temperature: -40 ~+85



### Applications

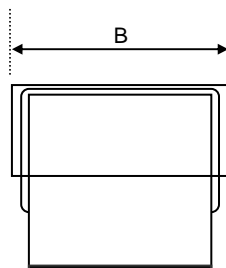
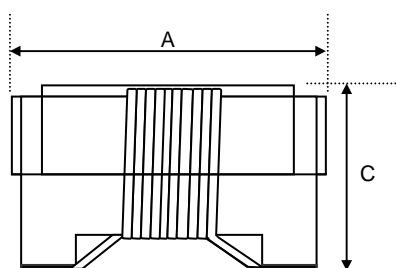
- > Cordless (DECT/CT1CT2) & Cellular (CDMA/GSM/PHS) Phone.
- > Remote control, wireless security system.
- > WLL, Wireless LAN / Mouse / Keyboard / Earphone.
- > Liquid Crystal Televisions.
- > VCO, RF Module & other wireless products.
- > CATV Filter, Tuner.
- > Cable Modem / XDSL Tuner.

### Features

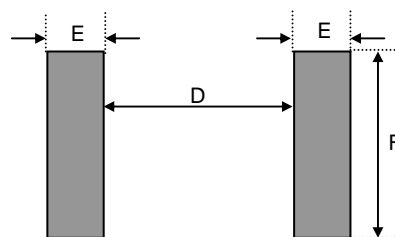
- > Wirewound ferrite construction provide high SRF.
- > Ultra compact inductors provide exceptional Q values.
- > Highly reliable in environments of sudden temperature change and humidity.
- > Low Profile, high current are available.
- > Outstanding endurance from Pull-up force, mechanical shock and 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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**Agilent 34401A** - DCR measurement

Operating Temperature: -40 ~+85

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

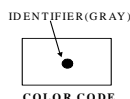
SERIES	Inductance (μH)	SRF (Min.) (MHz)	Q (Min.)	I (Rated) (mA)
WUI-0603F	0.270~47.00	900~11	12~16	950~100
WUI-0805F	0.100~82.00	1400~5	10~30	1700~60
WUI-1008F	0.100~100.00	930~7	8~30	1300~200
WUI-0603CF	0.047~15.00	2000~25	7~15	2200~240
WUI-0805CF	0.100~220.00	1700~4	8~15	2400~70
WUI-1008CF	0.100~330.00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

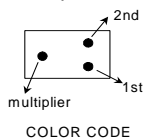


Ex : **WUI-0805F-390J**

**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.**

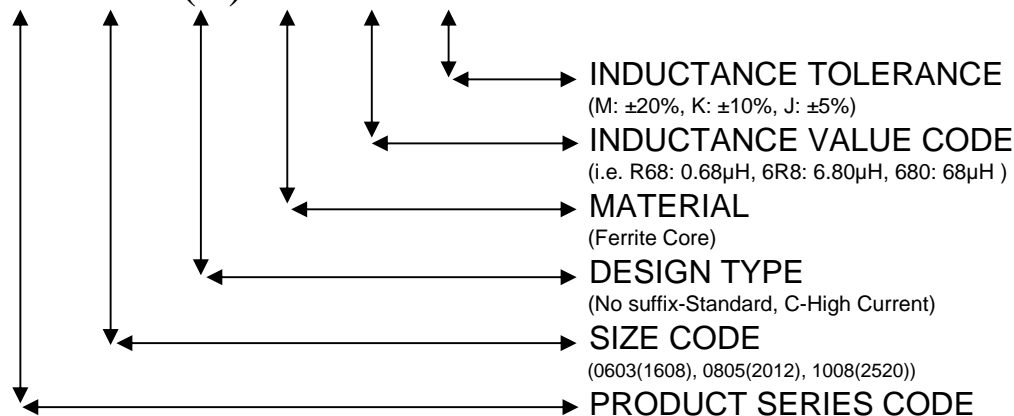
**(DOT 1 : BROWN , DOT 2 : BLACK)**

**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(a). WUI Series (Standard Type) (Size: 0603 (1608))**

#### **Electrical Characteristics**

##### **WUI-0603F Series Ferrite Wire Wound Chip Inductors / Standard Type**

Part Number	Inductance ( $\mu$ H) @_MHz	Tolerance	Q Typ. @_MHz	SRF (MHz) Typ.	DCR ( ) Max.	IDC (mA) Max.	Color Code
WUI-0603F-R27	0.27 @7.96	K,M	13 @7.96	900	0.338	950	Green
WUI-0603F-R47	0.47 @7.96	K,M	13 @7.96	900	0.338	920	Blue
WUI-0603F-R68	0.68 @7.96	K,M	13 @7.96	650	0.351	920	Violet
WUI-0603F-R78	0.78 @7.96	K,M	16 @7.96	410	0.364	920	Gray
WUI-0603F-1R0	1.0 @7.96	K,M	16 @7.96	390	0.416	860	Black
WUI-0603F-1R5	1.5 @7.96	K,M	16 @7.96	160	0.520	720	Brown
WUI-0603F-1R8	1.8 @7.96	K,M	16 @7.96	121	0.559	640	Red
WUI-0603F-2R2	2.2 @7.96	K,M	16 @7.96	103	0.728	600	Orange
WUI-0603F-2R7	2.7 @7.96	K,M	16 @7.96	72	0.806	540	Yellow
WUI-0603F-3R3	3.3 @7.96	K,M	16 @7.96	66	0.910	500	Green
WUI-0603F-3R9	3.9 @7.96	K,M	16 @7.96	61	1.079	460	Blue
WUI-0603F-4R7	4.7 @7.96	K,M	16 @7.96	51	1.261	400	Violet
WUI-0603F-5R6	5.6 @7.96	K,M	16 @7.96	47	1.430	380	Gray
WUI-0603F-6R8	6.8 @7.96	K,M	16 @7.96	43	1.950	340	White
WUI-0603F-8R2	8.2 @7.96	K,M	16 @7.96	40	2.184	300	Black
WUI-0603F-100	10 @2.52	K,M	14 @2.52	36	2.405	280	Brown
WUI-0603F-120	12 @2.52	K,M	14 @2.52	32	2.964	260	Red
WUI-0603F-150	15 @2.52	K,M	14 @2.52	29	3.380	240	Orange
WUI-0603F-180	18 @2.52	K,M	14 @2.52	28	3.770	220	Yellow
WUI-0603F-220	22 @2.52	K,M	14 @2.52	24	4.693	200	Green
WUI-0603F-270	27 @2.52	K,M	14 @2.52	20	6.760	140	Blue
WUI-0603F-330	33 @2.52	K,M	14 @2.52	15	8.580	120	Violet
WUI-0603F-470	47 @2.52	K,M	12 @2.52	11	14.560	100	Gray

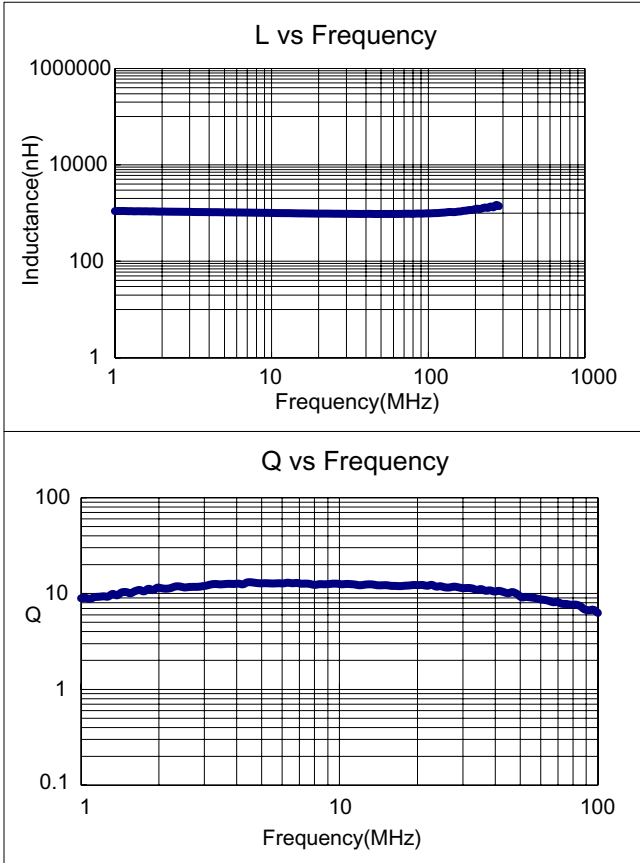
Remarks:

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

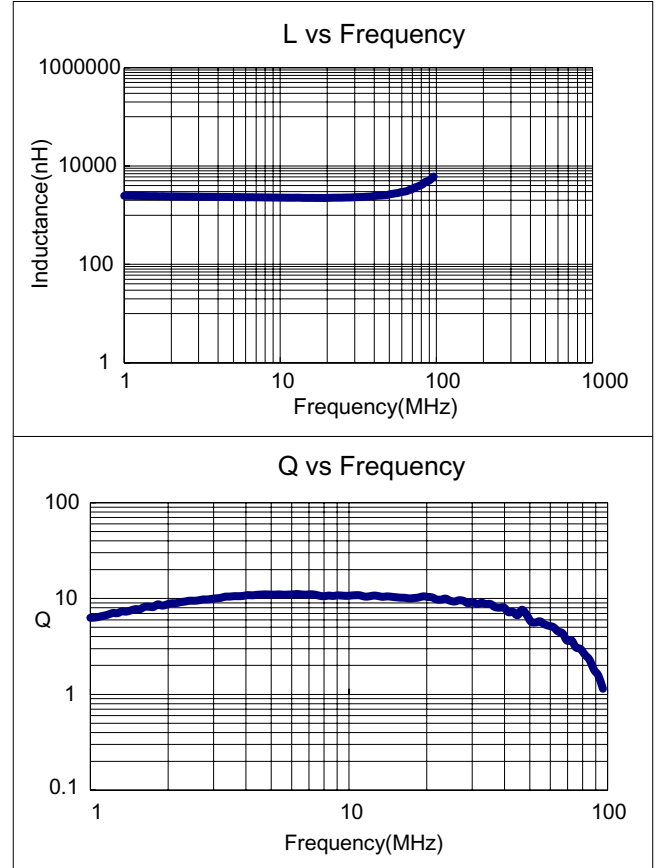
2(a). WUI Series (Standard Type) (Size: 0603 (1608))

Rating Curves

**WUI-0603F-1R0K**



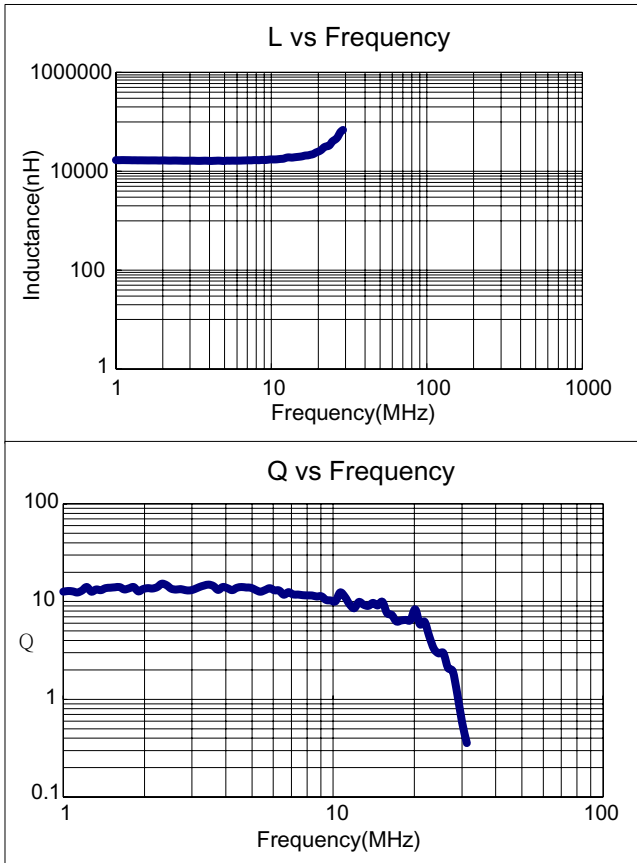
**WUI-0603F-2R2K**



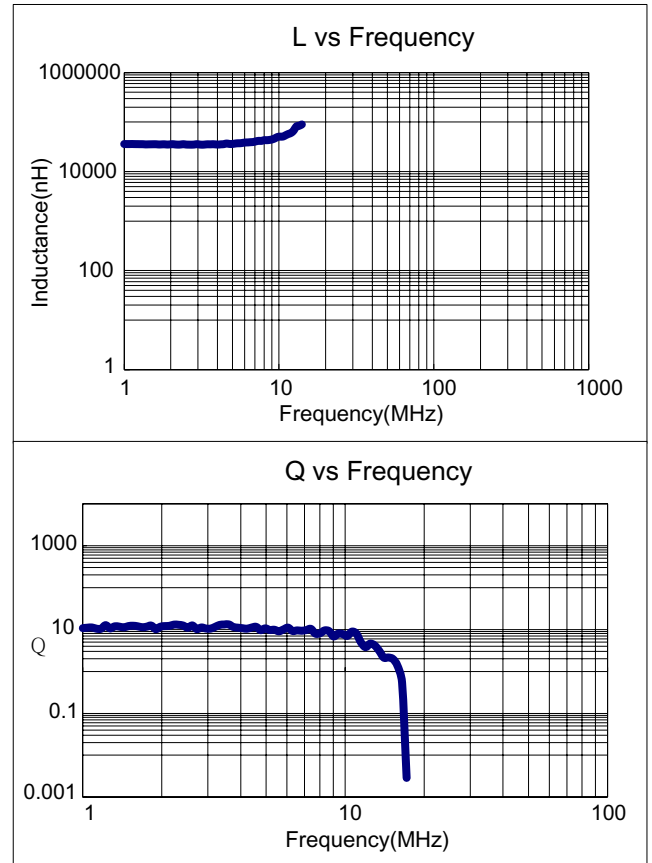
2(a). WUI Series (Standard Type) (Size: 0603 (1608))

Rating Curves (Cont'd)

**WUI-0603F-150K**



**WUI-0603F-330K**



## (IV) WIRE WOUND CHIP INDUCTORS

### 2(a). WUI Series (Standard Type) (Size: 0805 (2012))

#### Electrical Characteristics

##### WUI-0805F Series Ferrite Wire Wound Chip Inductors / **Standard Type**

Part Number	Inductance ( $\mu$ H) @_MHz	Tolerance	Q Typ. @_MHz	SRF (MHz) Min.	DCR ( ) Max.	IDC (mA) Max.	Color Code
WUI-0805F-R10	0.10 @25.2	K	20 @25.2	1400	0.10	1700	White
WUI-0805F-R11	0.11 @25.2	K	25 @25.2	1200	0.10	1700	White
WUI-0805F-R12	0.12 @25.2	J,K	25 @25.2	1000	0.18	1500	Violet
WUI-0805F-R15	0.15 @25.2	J,K	25 @25.2	1000	0.18	1400	Gray
WUI-0805F-R18	0.18 @25.2	J,K	30 @25.2	1000	0.20	1400	Black
WUI-0805F-R22	0.22 @25.2	J,K	30 @25.2	830	0.25	1350	Brown
WUI-0805F-R27	0.27 @25.2	J,K	30 @25.2	800	0.38	1300	Red
WUI-0805F-R33	0.33 @25.2	J,K	30 @25.2	750	0.35	1200	Orange
WUI-0805F-R39	0.39 @25.2	J,K	30 @25.2	700	0.35	1160	Yellow
WUI-0805F-R47	0.47 @25.2	J,K	30 @25.2	690	0.40	1100	Green
WUI-0805F-R56	0.56 @25.2	J,K	30 @25.2	640	0.40	1040	Blue
WUI-0805F-R62	0.62 @25.2	J,K	30 @25.2	640	0.45	980	Brown
WUI-0805F-R68	0.68 @25.2	J,K	30 @25.2	510	0.50	900	Violet
WUI-0805F-R82	0.82 @25.2	J,K	30 @25.2	500	0.50	900	Gray
WUI-0805F-R91	0.91 @25.2	J,K	30 @25.2	500	0.55	900	Yellow
WUI-0805F-1R0	1.0 @7.96	J,K	20 @7.96	470	0.50	840	White
WUI-0805F-1R2	1.2 @7.96	J,K	20 @7.96	400	0.75	800	Black
WUI-0805F-1R5	1.5 @7.96	J,K	25 @7.96	400	1.00	720	Brown
WUI-0805F-1R8	1.8 @7.96	J,K	25 @7.96	230	1.00	660	Red
WUI-0805F-2R2	2.2 @7.96	J,K	25 @7.96	200	1.05	600	Orange
WUI-0805F-2R7	2.7 @7.96	J,K	25 @7.96	130	1.18	500	Yellow
WUI-0805F-3R3	3.3 @7.96	J,K	25 @7.96	160	1.26	480	Green
WUI-0805F-3R9	3.9 @7.96	J,K	25 @7.96	130	1.75	440	Blue
WUI-0805F-4R7	4.7 @7.96	J,K	25 @7.96	120	1.87	390	Violet
WUI-0805F-5R6	5.6 @7.96	J,K	25 @7.96	90	2.00	340	Gray
WUI-0805F-6R8	6.8 @7.96	J,K	25 @7.96	55	2.15	300	White
WUI-0805F-8R2	8.2 @7.96	J,K	25 @7.96	40	2.37	280	Black
WUI-0805F-100	10 @2.52	J,K	16 @2.52	40	2.55	260	Brown
WUI-0805F-120	12 @2.52	J,K	16 @2.52	37	2.80	220	Red
WUI-0805F-150	15 @2.52	J,K	16 @2.52	30	3.80	200	Orange
WUI-0805F-180	18 @2.52	J,K	16 @2.52	23	4.48	180	Yellow
WUI-0805F-220	22 @2.52	J,K	16 @2.52	20	6.30	160	Green
WUI-0805F-270	27 @2.52	J,K	16 @2.52	19	6.85	140	Blue
WUI-0805F-330	33 @2.52	J,K	16 @2.52	18	7.60	120	Violet
WUI-0805F-390	39 @2.52	J,K	15 @2.52	16	8.20	100	Gray
WUI-0805F-470	47 @2.52	J,K	13 @2.52	13	13.10	60	White
WUI-0805F-680	68 @2.52	J,K	12 @2.52	6	19.20	60	Gray
WUI-0805F-820	82 @2.52	J,K	10 @2.52	5	21.60	60	Red

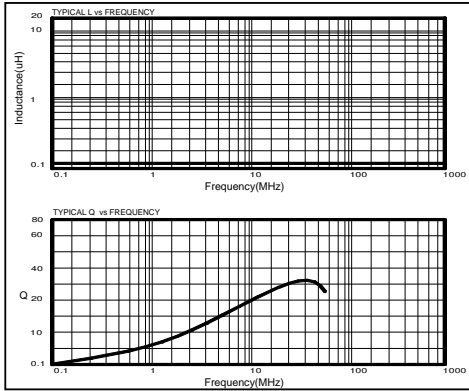
#### Remarks:

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

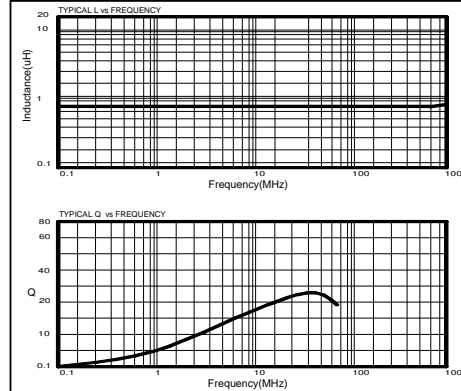
2(a). WUI Series (Standard Type) (Size: 0805 (2012))

Rating Curves

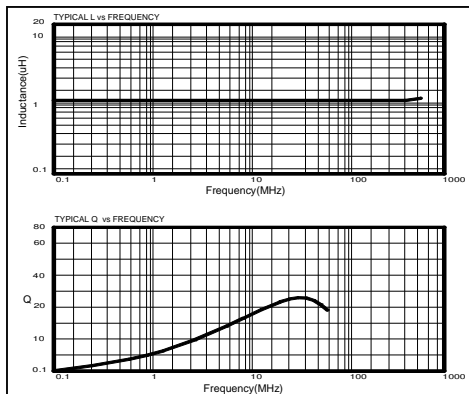
WUI-0805F-R12K



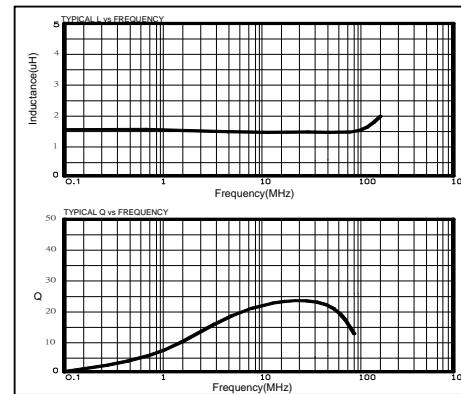
WUI-0805F-R68K



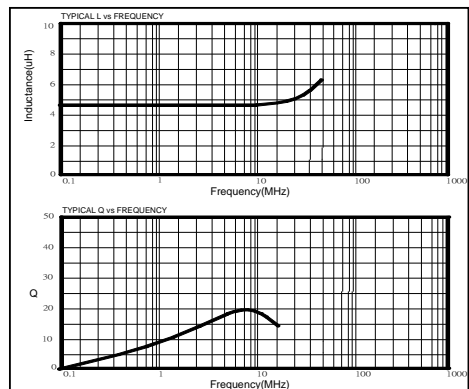
WUI-0805F-1R2K



WUI-0805F-1R5K



WUI-0805F-4R7K



## (IV) WIRE WOUND CHIP INDUCTORS

Tri-Tron

### 2(a). WUI Series (Standard Type) (Size: 1008 (2520))

#### Electrical Characteristics

##### WUI-1008F Series Ferrite Wire Wound Chip Inductors / Standard Type

Part Number	Inductance ( $\mu$ H) @_MHz	Tolerance	Q Typ. @_MHz	SRF (MHz) Typ.	DCR ( ) Max.	IDC (mA) Max.	Color Code		
							1st	2nd	multiplier
WUI-1008F-R10	0.10 @25.2	K	25 @25.2	930	0.20	1300	Brown	Black	Brown
WUI-1008F-R12	0.12 @25.2	J,K	26 @25.2	930	0.30	1000	Brown	Red	Brown
WUI-1008F-R15	0.15 @25.2	J,K	36 @25.2	930	0.30	1000	Brown	Green	Brown
WUI-1008F-R18	0.18 @25.2	J,K	30 @25.2	930	0.30	960	Brown	Gray	Brown
WUI-1008F-R20	0.20 @25.2	J,K	30 @25.2	735	0.30	960	Red	Black	Brown
WUI-1008F-R22	0.22 @25.2	J,K	27 @25.2	750	0.40	880	Red	Red	Brown
WUI-1008F-R27	0.27 @25.2	J,K	29 @25.2	700	0.42	900	Red	Violet	Brown
WUI-1008F-R33	0.33 @25.2	J,K	30 @25.2	600	0.42	900	Orange	Orange	Brown
WUI-1008F-R39	0.39 @25.2	J,K	30 @25.2	480	0.45	920	Orange	White	Brown
WUI-1008F-R47	0.47 @25.2	J,K	30 @25.2	470	0.50	920	Yellow	Violet	Brown
WUI-1008F-R56	0.56 @25.2	J,K	30 @25.2	460	0.55	900	Green	Blue	Brown
WUI-1008F-R62	0.62 @25.2	J,K	30 @25.2	460	0.55	900	Blue	Red	Brown
WUI-1008F-R68	0.68 @25.2	J,K	30 @25.2	420	0.55	880	Blue	Gray	Brown
WUI-1008F-R75	0.75 @25.2	J,K	30 @25.2	420	0.65	880	Violet	Green	Brown
WUI-1008F-R82	0.82 @25.2	J,K	30 @25.2	380	0.65	840	Gray	Red	Brown
WUI-1008F-R91	0.91 @25.2	J,K	30 @25.2	400	0.65	840	White	Brown	Brown
WUI-1008F-1R0	1.0 @7.96	J,K	25 @7.96	300	0.60	800	Brown	Black	Red
WUI-1008F-1R2	1.2 @7.96	J,K	25 @7.96	280	0.74	800	Brown	Red	Red
WUI-1008F-1R5	1.5 @7.96	J,K	25 @7.96	245	0.85	780	Brown	Green	Red
WUI-1008F-1R8	1.8 @7.96	J,K	25 @7.96	240	0.92	780	Brown	Gray	Red
WUI-1008F-2R2	2.2 @7.96	J,K	25 @7.96	205	1.10	760	Red	Red	Red
WUI-1008F-2R7	2.7 @7.96	J,K	25 @7.96	187	1.22	760	Red	Violet	Red
WUI-1008F-3R3	3.3 @7.96	J,K	25 @7.96	165	1.37	740	Orange	Orange	Red
WUI-1008F-3R9	3.9 @7.96	J,K	25 @7.96	144	1.66	700	Orange	White	Red
WUI-1008F-4R7	4.7 @7.96	J,K	25 @7.96	110	1.68	660	Yellow	Violet	Red
WUI-1008F-5R6	5.6 @7.96	J,K	25 @7.96	88	1.75	640	Green	Blue	Red
WUI-1008F-6R8	6.8 @7.96	J,K	25 @7.96	70	1.85	640	Blue	Gray	Red
WUI-1008F-8R2	8.2 @7.96	J,K	25 @7.96	57	2.00	600	Gray	Red	Red
WUI-1008F-100	10 @2.52	J,K	25 @2.52	55	2.32	600	Brown	Black	Orange
WUI-1008F-120	12 @2.52	J,K	15 @2.52	52	2.99	560	Brown	Red	Orange
WUI-1008F-150	15 @2.52	J,K	15 @2.52	49	3.42	480	Brown	Green	Orange
WUI-1008F-180	18 @2.52	J,K	15 @2.52	48	4.65	420	Brown	Gray	Orange
WUI-1008F-220	22 @2.52	J,K	15 @2.52	25	5.12	420	Red	Red	Orange
WUI-1008F-270	27 @2.52	J,K	15 @2.52	23	5.76	420	Red	Violet	Orange
WUI-1008F-330	33 @2.52	J,K	15 @2.52	17	6.44	400	Orange	Orange	Orange
WUI-1008F-390	39 @2.52	J,K	15 @2.52	15	6.85	380	Orange	White	Orange
WUI-1008F-470	47 @2.52	J,K	14 @2.52	13	9.94	260	Yellow	Violet	Orange
WUI-1008F-560	56 @2.52	J,K	14 @2.52	10	10.7	280	Green	Blue	Orange
WUI-1008F-680	68 @2.52	J,K	14 @2.52	8	12.8	260	Blue	Gray	Orange
WUI-1008F-820	82 @2.52	J,K	14 @2.52	8	18.3	240	Gray	Red	Orange
WUI-1008F-101	100 @1.00	J,K	8 @1.00	7	19.6	200	Brown	Black	Yellow

Remarks:

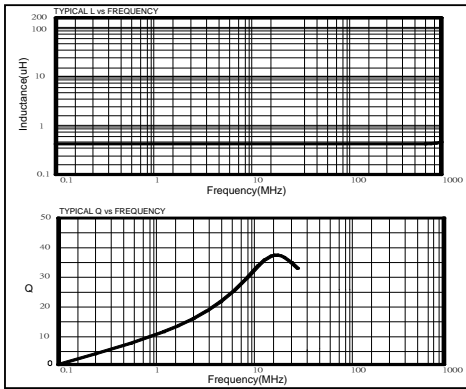
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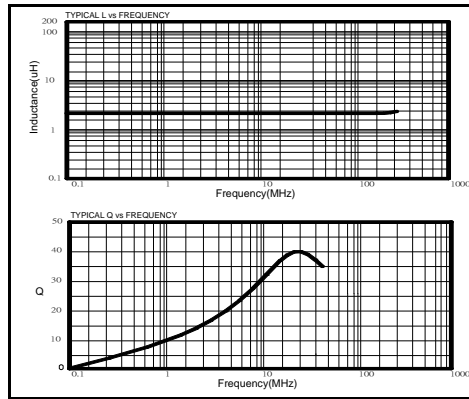
**2(a). WUI Series (Standard Type) (Size: 1008 (2520))**

**Rating Curves**

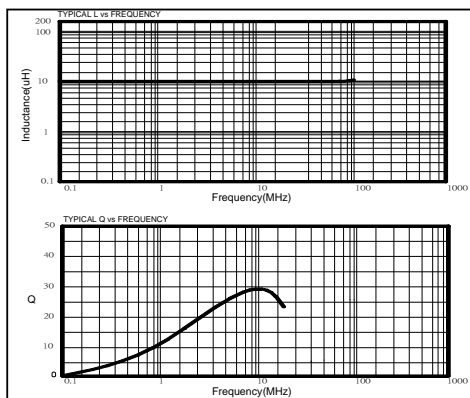
**WUI-1008F-R47K**



**WUI-1008F-2R7K**



**WUI-1008F-100K**



**WUI-1008F-101K**

