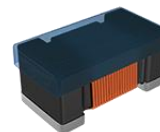


# Wire Wound Chip Ferrite Inductor - WL-FS Series

Operating Temp. : -40°C~+85°C



## FEATURES

- Small chip suitable for surface mounting
- Large inductance with ferrite material

## APPLICATIONS

- Mobile phones and other electronic devices

## PRODUCT IDENTIFICATION

**WL**

①

**1608**

②

**F**

③

**S**

④

**18N**

⑤

**J**

⑥

**T**

⑦

**F**

⑧

□□□

⑨

①

Type	
WL	Wire Wound Chip Inductor

②

External Dimensions	
1608[0603]	

③

Material Code	
F	Ferrite

④

Feature Type	
S	Standard

⑤

Nominal Inductance	
Example	Nominal Value
18N	18nH
R13	130nH

⑥

Inductance Tolerance	
D	±0.5nH
J	±5%
K	±10%
M	±20%

⑦

Packing	
T	Tape & Reel

⑧

Hazardous Substance Free Products	
F	

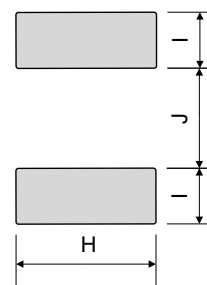
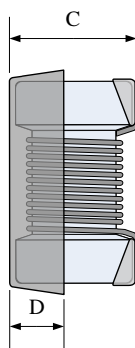
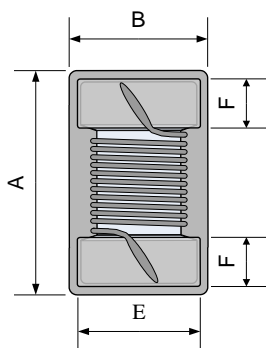
⑨

Design Code	
□□□	Design Code
*Standard product is blank	

## SHAPE AND DIMENSIONS

WL-FS

Land Pattern



Unit: mm

Series	A	B	C	D Typ.	E	F	H Typ.	I Typ.	J Typ.
WL1608FS	1.7±0.2	1.05±0.2	0.8±0.2	0.38	0.76±0.1	0.3±0.1	1.02	0.64	0.64
WL1608FS-M01	1.7±0.2	0.95±0.2	0.8±0.2	0.38	0.76±0.1	0.3±0.1	1.02	0.64	0.64

# SPECIFICATIONS

## WL1608FS TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	MHz	MHz	$\Omega$	mA
Symbol	L	-	Freq.	S.R.F	DCR	I <sub>r</sub>
WL1608FS47N□TF	47	K,M	7.9	2350	0.06	1200
WL1608FS51N□TF	51	J,K,M	7.9	2300	0.07	1050
WL1608FSR10□TF	100	K,M	7.9	1370	0.11	850
WL1608FSR12□TF	120	J,K,M	7.9	1340	0.18	670
WL1608FSR15□TF	150	J,K,M	7.9	1260	0.12	820
WL1608FSR18□TF	180	J,K,M	7.9	1060	0.19	670
WL1608FSR20□TF	200	J,K,M	7.9	1030	0.14	740
WL1608FSR22□TF	220	J,K,M	7.9	850	0.20	650
WL1608FSR24□TF	240	J,K,M	7.9	800	0.17	690
WL1608FSR25□TF	250	J,K,M	7.9	910	0.17	690
WL1608FSR27□TF	270	J,K,M	7.9	780	0.24	630
WL1608FSR33□TF	330	J,K,M	7.9	730	0.29	510
WL1608FSR39□TF	390	J,K,M	7.9	750	0.33	490
WL1608FSR47□TF	470	J,K,M	7.9	670	0.37	470
WL1608FSR50□TF	500	J,K,M	7.9	610	0.45	410
WL1608FSR56□TF	560	J,K,M	7.9	590	0.51	380
WL1608FSR62□TF	620	J,K,M	7.9	570	0.48	390
WL1608FSR65□TF	650	J,K,M	7.9	550	0.61	350
WL1608FSR68□TF	680	J,K,M	7.9	520	0.77	310
WL1608FSR78□TF	780	J,K,M	7.9	480	0.83	300
WL1608FSR82□TF	820	J,K,M	7.9	500	0.88	290
WL1608FS1R0□TF	1000	J,K,M	7.9	410	0.94	280
WL1608FS1R2□TF	1200	J,K,M	7.9	370	1.10	260
WL1608FS1R5□TF	1500	J,K,M	7.9	340	1.30	240
WL1608FS1R8□TF	1800	J,K,M	7.9	190	1.40	230
WL1608FS2R2□TF	2200	J,K,M	7.9	120	1.50	220
WL1608FS2R7□TF	2700	J,K,M	7.9	70	1.60	210
WL1608FS3R3□TF	3300	J,K,M	7.9	60	1.80	200
WL1608FS3R9□TF	3900	J,K,M	7.9	50	1.90	190
WL1608FS4R7□TF	4700	J,K,M	7.9	50	2.70	160
WL1608FS5R6□TF	5600	J,K,M	7.9	40	3.00	150
WL1608FS6R8□TF	6800	J,K,M	7.9	40	4.00	130
WL1608FS7R8□TF	7800	J,K,M	7.9	40	4.40	120
WL1608FS8R2□TF	8200	J,K,M	7.9	40	4.50	110
WL1608FS100□TF	10000	J,K,M	2.5	30	5.00	100
WL1608FS150□TF	15000	J,K,M	2.5	20	9.50	90
WL1608FS180□TF	18000	J,K,M	2.5	20	10.40	80
WL1608FS220□TF	22000	J,K,M	2.5	20	11.40	70
WL1608FS470□TF	47000	J,K,M	2.5	10	18.60	80

# SPECIFICATIONS

## WL1608FS-M01 TYPE

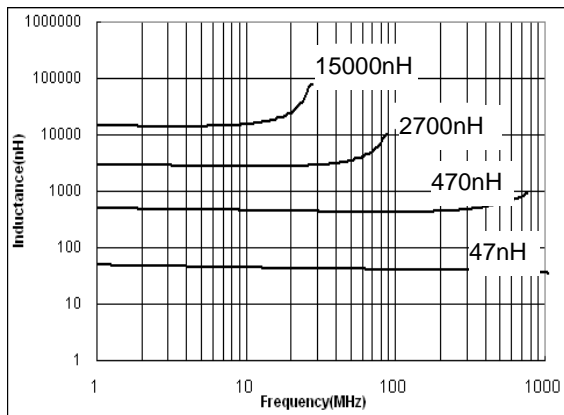
Part Number	Inductance	Tolerance	L Test Freq.	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	MHz	MHz	$\Omega$	mA
Symbol	L	-	Freq.	S.R.F	DCR	I <sub>r</sub>
WL1608FS4N9□TFM01	4.9	D,K,M	10	2300	0.015	2600
WL1608FS15N□TFM01	15	J,K,M	10	2000	0.025	2200
WL1608FS33N□TFM01	33	J,K,M	10	1800	0.035	1700
WL1608FS55N□TFM01	55	J,K,M	10	1600	0.045	1500
WL1608FS85N□TFM01	85	J,K,M	10	1380	0.060	1400
WL1608FSR10□TFM01	100	K,M	10	1260	0.100	1000
WL1608FSR12□TFM01	120	J,K,M	10	1200	0.085	1100
WL1608FSR16□TFM01	160	J,K,M	10	900	0.100	1000
WL1608FSR21□TFM01	210	J,K,M	10	720	0.150	800
WL1608FSR27□TFM01	270	J,K,M	10	660	0.160	750
WL1608FSR33□TFM01	330	J,K,M	10	600	0.250	630
WL1608FSR39□TFM01	390	J,K,M	10	570	0.280	620
WL1608FSR47□TFM01	470	J,K,M	10	555	0.450	500
WL1608FSR56□TFM01	560	J,K,M	10	540	0.480	450
WL1608FSR65□TFM01	650	J,K,M	10	510	0.520	430

※ □: Please specify the inductance tolerance code (D=±0.5nH, J=±5%, K=±10%, M=±20%).

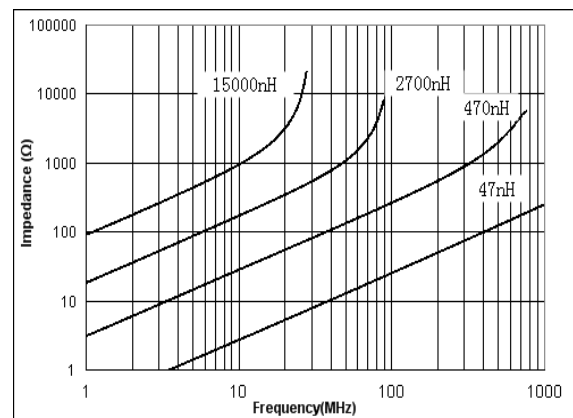
## TYPICAL ELECTRICAL CHARACTERISTICS

### WL1608FS TYPE

Inductance vs. Frequency Characteristics

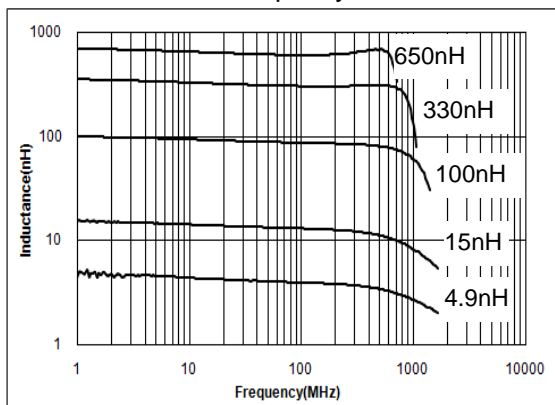


Impedance vs. Frequency Characteristics



### WL1608FS-M01 TYPE

Inductance vs. Frequency Characteristics



Impedance vs. Frequency Characteristics

