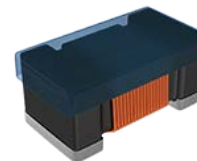


Wire Wound Chip Ferrite Inductor - WL-FS Series

Operating Temp. : -40°C~+85°C



FEATURES

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

APPLICATIONS

- Mobile phones, video cameras 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	
J	±5%
K	±10%
M	±20%

⑦

Packing	
T	Tape & Reel

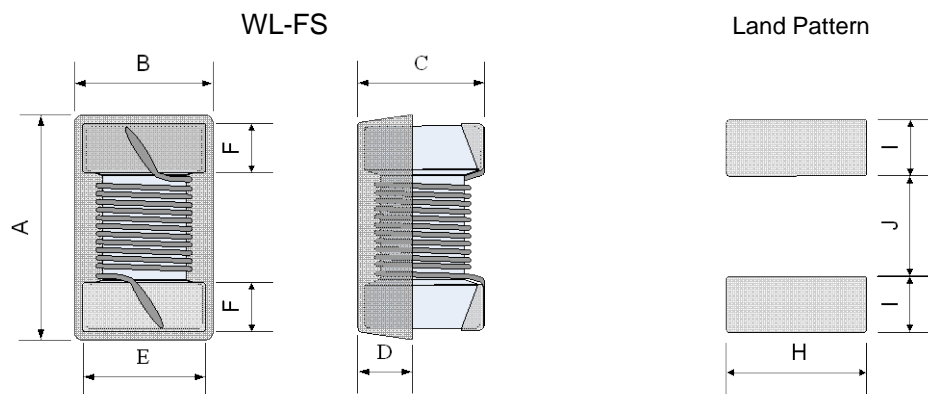
⑧

Hazardous Substance Free Products	
F	

⑨

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

SHAPE AND DIMENSIONS



Unit: mm

Series	A	B	C	D Typ.	E	F	H Typ.	I Typ.	J Typ.
WL1608FS	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
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

WL1005FS TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
WL1005FS20N□TF	20	J,K,M	7.9	0.050	1600	2600
WL1005FS22N□TF	22	J,K,M	7.9	0.065	1300	2500
WL1005FS33N□TF	33	J,K,M	7.9	0.060	1400	2300
WL1005FS36N□TF	36	J,K,M	7.9	0.075	1300	2300
WL1005FS39N□TF	39	J,K,M	7.9	0.115	830	2200
WL1005FS51N□TF	51	J,K,M	7.9	0.070	1100	1930
WL1005FS56N□TF	56	J,K,M	7.9	0.095	1000	1900
WL1005FS72N□TF	72	J,K,M	7.9	0.100	1000	1650
WL1005FS78N□TF	78	J,K,M	7.9	0.130	970	1600
WL1005FSR10□TF	100	J,K,M	7.9	0.160	900	1400
WL1005FSR14□TF	140	J,K,M	7.9	0.260	630	1220
WL1005FSR18□TF	180	J,K,M	7.9	0.280	560	1150
WL1005FSR20□TF	200	J,K,M	7.9	0.440	400	1000
WL1005FSR22□TF	220	J,K,M	7.9	0.530	380	1150
WL1005FSR25□TF	250	J,K,M	7.9	0.450	520	900
WL1005FSR27□TF	270	J,K,M	7.9	0.550	360	860
WL1005FSR30□TF	300	J,K,M	7.9	0.410	420	860
WL1005FSR33□TF	330	J,K,M	7.9	0.560	350	820
WL1005FSR36□TF	360	J,K,M	7.9	0.575	360	810
WL1005FSR39□TF	390	J,K,M	7.9	0.750	300	760
WL1005FSR42□TF	420	J,K,M	7.9	0.700	340	700
WL1005FSR47□TF	470	J,K,M	7.9	0.730	310	650
WL1005FSR56□TF	560	J,K,M	7.9	0.920	200	600

WL1005FS-M01 TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
WL1005FS18N□TFM01	18	J,K,M	100	0.046	1400	3000
WL1005FS20N□TFM01	20	J,K,M	100	0.028	2200	3000
WL1005FS33N□TFM01	33	J,K,M	100	0.065	1300	1800
WL1005FS34N□TFM01	34	J,K,M	100	0.036	1800	2500
WL1005FS48N□TFM01	48	J,K,M	100	0.078	1100	1400
WL1005FS53N□TFM01	53	J,K,M	100	0.060	1300	2000
WL1005FS68N□TFM01	68	J,K,M	100	0.120	820	1300
WL1005FS70N□TFM01	70	J,K,M	100	0.120	820	1300
WL1005FS77N□TFM01	77	J,K,M	100	0.090	1100	2000
WL1005FS96N□TFM01	96	J,K,M	100	0.160	730	1100
WL1005FSR11□TFM01	106	J,K,M	100	0.144	850	1500
WL1005FSR13□TFM01	130	J,K,M	100	0.230	640	1000
WL1005FSR14□TFM01	140	J,K,M	100	0.216	650	1000
WL1005FSR16□TFM01	160	J,K,M	100	0.330	480	900
WL1005FSR18□TFM01	180	J,K,M	100	0.312	560	1000

SPECIFICATIONS

WL1005FS-M01 TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
WL1005FSR20□TFM01	200	J,K,M	100	0.470	390	800
WL1005FSR22□TFM01	220	J,K,M	100	0.470	450	1100
WL1005FSR27□TFM01	270	J,K,M	100	0.520	420	730
WL1005FSR33□TFM01	330	J,K,M	100	0.560	390	520
WL1005FSR39□TFM01	390	J,K,M	100	0.620	370	350
WL1005FSR42□TFM01	420	J,K,M	10	0.620	370	320
WL1005FSR47□TFM01	470	J,K,M	10	0.660	350	380
WL1005FSR56□TFM01	560	K,M	10	0.710	300	300

WL1608FS TYPE

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

SPECIFICATIONS

WL1608FS TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
WL1608FS7R8□TF	7800	J,K,M	7.9	4.40	120	40
WL1608FS8R2□TF	8200	J,K,M	7.9	4.50	110	40
WL1608FS100□TF	10000	J,K,M	2.5	5.00	100	30
WL1608FS150□TF	15000	J,K,M	2.5	9.50	90	20
WL1608FS180□TF	18000	J,K,M	2.5	10.40	80	20
WL1608FS220□TF	22000	J,K,M	2.5	11.40	70	20

WL1608FS-M01 TYPE

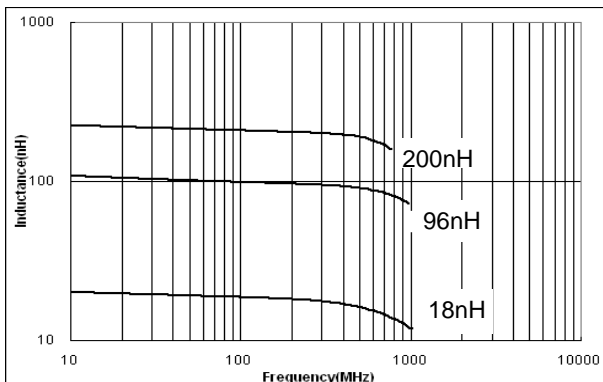
Part Number	Inductance	Tolerance	L Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	MHz	Ω	mA	MHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
WL1608FS4N9□TFM01	4.9	D,K,M	10	0.015	2600	2300
WL1608FS15N□TFM01	15	J,K,M	10	0.025	2200	2000
WL1608FS33N□TFM01	33	J,K,M	10	0.035	1700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

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

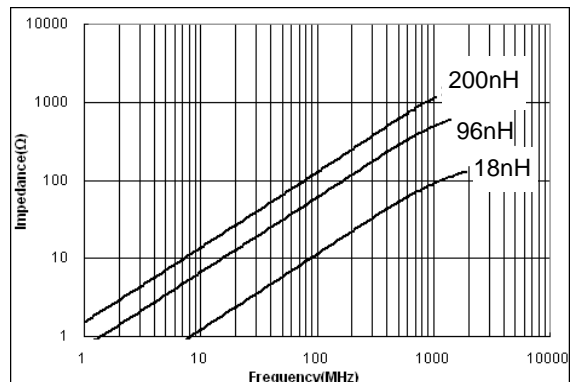
TYPICAL ELECTRICAL CHARACTERISTICS

WL1005FS TYPE

Inductance vs. Frequency Characteristics



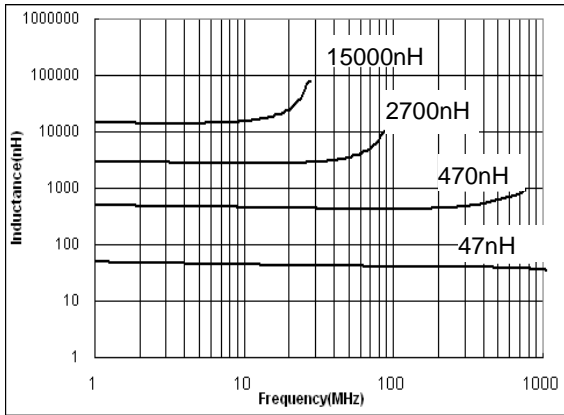
Impedance vs. Frequency Characteristics



TYPICAL ELECTRICAL CHARACTERISTICS

WL1608FS TYPE

Inductance vs. Frequency Characteristics



Impedance vs. Frequency Characteristics

