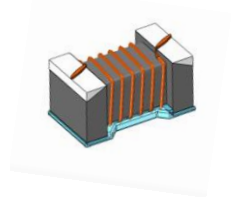


Wire Wound Chip Ferrite Inductor – MWSD-F Series

Operating Temp. : -40℃~+85℃



FEATUREF

- Small chip suitable for surface mounting
- Large inductance with ferrite material
- Single-sided package, thinner than WL-FS series

APPLICATIONF

- Mobile phones, video cameras and other electronic devices

PRODUCT IDENTIFICATION

①

MWSD

①

②

1005

②

③

F

③

④

18N

④

⑤

J

⑤

⑥

T

⑥

⑦

□□□

⑦

①

Type

MWFD

Wire Wound Chip Inductor

②

External Dimensions

0603 [0201]

0703[026011]

1005 [0402]

③

Material Code

F

Ferrite

④

Nominal Inductance

Example

Nominal Value

1N0

1.0nH

10N

10nH

R10

100nH

⑤

Inductance Tolerance

J

±5%

K

±10%

M

±20%

⑥

Packing

B

Bulk Package

T

Tape & Reel

⑦

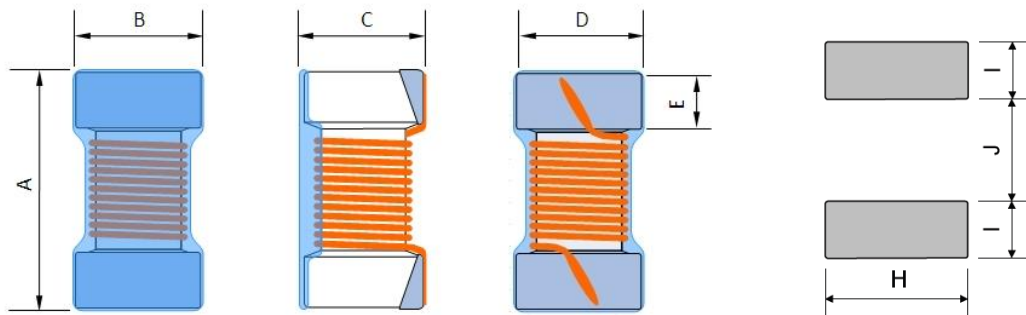
Design Code

□□□

Design Code

*Standard product is blank

SHAPE AND DIMENSIONS



SHAPE AND DIMENSIONS

Unit: mm

Series	A	B	C	D Typ.	E	H Ref.	I Ref.	J Ref.
MWSD0603F	0.53±0.05	0.40±0.05	0.40±0.05	0.39±0.05	0.10±0.05	0.50	0.20	0.23
MWSD0703F	0.76Max.	0.43Max.	0.57Max.	0.28±0.05	0.13±0.05	0.36	0.25	0.41
MWSD1005F	1.10±0.1	0.60±0.1	0.55±0.1	0.50±0.10	0.20±0.10	0.65	0.35	0.50
MWSD1005F-M01	1.10±0.1	0.60±0.1	0.55±0.1	0.50±0.10	0.20±0.10	0.65	0.35	0.50

SPECIFICATIONS

MWSD0603F TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	MHz	Ω	mA	GHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
MWSD0603F33N□T	33	K	7.9	0.15	340	3.4
MWSD0603F51N□T	51	K	7.9	0.30	280	2.9
MWSD0603F68N□T	68	K	7.9	0.33	220	2.6
MWSD0603F91N□T	91	K	7.9	0.37	200	2.35
MWSD0603FR11□T	110	K	7.9	0.48	170	2.1
MWSD0603FR14□T	140	K	7.9	0.65	160	2.0
MWSD0603FR17□T	170	K	7.9	0.86	140	1.85
MWSD0603FR20□T	200	K	7.9	1.25	110	1.7

MWSD0703F TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	MHz	Ω	mA	GHz
Symbol	L	-	Freq.	DCR	I _r	S.R.F
MWSD0703F27N□T	27	J	7.9	0.11	480	3.9
MWSD0703F72N□T	72	J	7.9	0.4	210	2.6
MWSD0703FR10□T	100	J	7.9	0.5	200	2.3
MWSD0703FR15□T	150	J	7.9	0.6	190	1.8
MWSD0703FR27□T	270	J	7.9	1.15	130	1.6
MWSD0703FR43□T	430	J	7.9	1.85	100	0.9
MWSD0703FR56□T	560	J	7.9	2.8	90	1.0

MWSD1005F 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
MWSD1005F20N□T	20	J,K,M	7.9	0.050	1600	2600
MWSD1005F22N□T	22	J,K,M	7.9	0.065	1300	2500
MWSD1005F33N□T	33	J,K,M	7.9	0.060	1400	2300
MWSD1005F36N□T	36	J,K,M	7.9	0.075	1300	2300
MWSD1005F39N□T	39	J,K,M	7.9	0.115	830	2200
MWSD1005F51N□T	51	J,K,M	7.9	0.070	1100	1930
MWSD1005F56N□T	56	J,K,M	7.9	0.095	1000	1900
MWSD1005F72N□T	72	J,K,M	7.9	0.100	1000	1650

SPECIFICATIONS

MWSD1005F 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
MWSD1005F78N□T	78	J,K,M	7.9	0.130	970	1600
MWSD1005FR10□T	100	J,K,M	7.9	0.160	900	1400
MWSD1005FR14□T	140	J,K,M	7.9	0.260	630	1220
MWSD1005FR18□T	180	J,K,M	7.9	0.280	560	1150
MWSD1005FR20□T	200	J,K,M	7.9	0.440	400	1000
MWSD1005FR22□T	220	J,K,M	7.9	0.530	380	1150
MWSD1005FR25□T	250	J,K,M	7.9	0.450	520	900
MWSD1005FR27□T	270	J,K,M	7.9	0.550	360	860
MWSD1005FR30□T	300	J,K,M	7.9	0.410	420	860
MWSD1005FR33□T	330	J,K,M	7.9	0.560	350	820
MWSD1005FR36□T	360	J,K,M	7.9	0.575	360	810
MWSD1005FR39□T	390	J,K,M	7.9	0.750	300	760
MWSD1005FR42□T	420	J,K,M	7.9	0.700	340	700
MWSD1005FR47□T	470	J,K,M	7.9	0.730	310	650
MWSD1005FR56□T	560	J,K,M	7.9	0.920	200	600
MWSD1005F2R2□T	2200	K,M	1	1.8	170	100

MWSD1005F-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
MWSD1005F18N□TM01	18	J,K,M	100	0.046	1400	3000
MWSD1005F20N□TM01	20	J,K,M	100	0.028	2200	3000
MWSD1005F33N□TM01	33	J,K,M	100	0.065	1300	1800
MWSD1005F34N□TM01	34	J,K,M	100	0.036	1800	2500
MWSD1005F48N□TM01	48	J,K,M	100	0.078	1100	1400
MWSD1005F53N□TM01	53	J,K,M	100	0.060	1300	2000
MWSD1005F68N□TM01	68	J,K,M	100	0.120	820	1300
MWSD1005F70N□TM01	70	J,K,M	100	0.120	820	1300
MWSD1005F77N□TM01	77	J,K,M	100	0.090	1100	2000
MWSD1005F96N□TM01	96	J,K,M	100	0.160	730	1100
MWSD1005FR11□TM01	106	J,K,M	100	0.144	850	1500
MWSD1005FR13□TM01	130	J,K,M	100	0.230	640	1000
MWSD1005FR14□TM01	140	J,K,M	100	0.216	650	1000
MWSD1005FR16□TM01	160	J,K,M	100	0.330	480	900
MWSD1005FR18□TM01	180	J,K,M	100	0.312	560	1000
MWSD1005FR20□TM01	200	J,K,M	100	0.470	390	800
MWSD1005FR22□TM01	220	J,K,M	100	0.470	450	1100
MWSD1005FR27□TM01	270	J,K,M	100	0.520	420	730
MWSD1005FR33□TM01	330	J,K,M	100	0.560	390	520
MWSD1005FR39□TM01	390	J,K,M	100	0.620	370	350
MWSD1005FR42□TM01	420	J,K,M	10	0.620	370	320
MWSD1005FR47□TM01	470	J,K,M	10	0.660	350	380
MWSD1005FR56□TM01	560	K,M	10	0.710	300	300
MWSD1005F2R2□TM01	2200	K,M	1	1.80	170	100

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

Sunlord

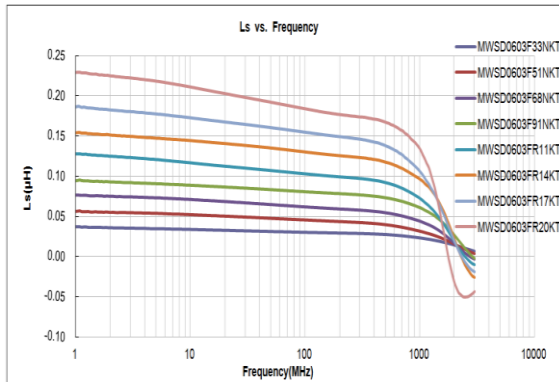
Specifications subject to change without notice. Please check our website for latest information. Revised 2020/2/17.

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TYPICAL ELECTRICAL CHARACTERISTICS

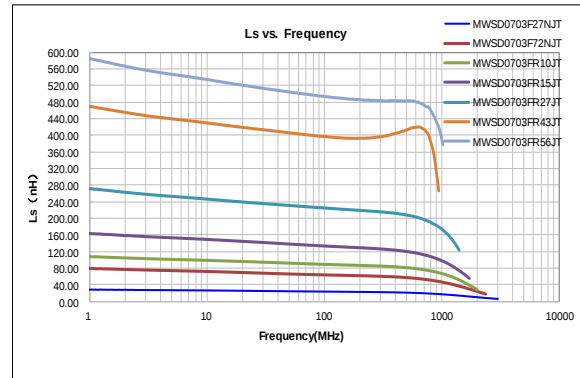
MWSD0603F TYPE

Inductance vs. Frequency Characteristics



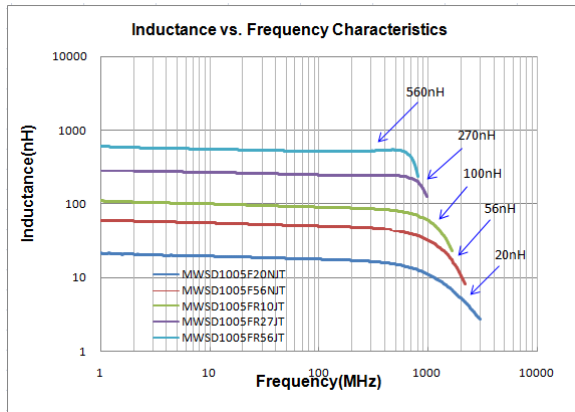
MWSD0703F TYPE

Inductance vs. Frequency Characteristics

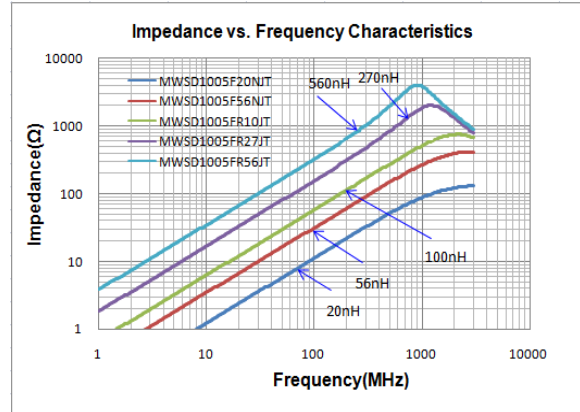


MWSD1005F TYPE

Inductance vs. Frequency Characteristics

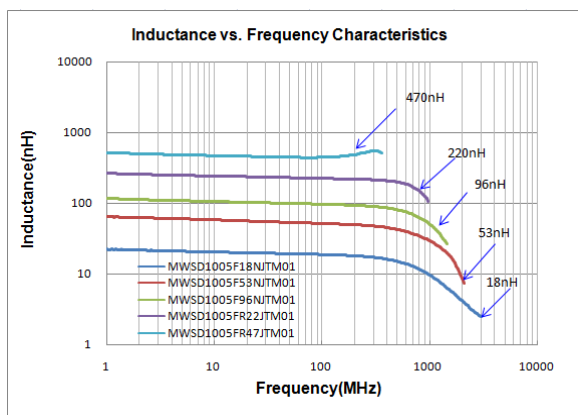


Impedance vs. Frequency Characteristics



MWSD1005F-M01 TYPE

Inductance vs. Frequency Characteristics



Impedance vs. Frequency Characteristics

