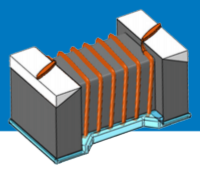
Wire Wound Chip Ferrite Inductor – MWSD – FE Series



Operating temp. : -40°C ~+85°C

FEATURES

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

APPLICATIONS

- Mobile phones and other electronic devices
- Bluetooth modules and TWS earphones

PRODUCT IDENTIFICATION

1	2	3	4	5	6	7
MWSD	1608	F	E	2R2	□	T

1

Type	
MWSD	Wire Wound Chip Inductor

2

External Dimensions (L×W) (mm)	
1608 [0603]	1.6×0.8
2012 [0805]	2.0×1.25

3

Material Code	
F	Ferrite

4

Internal Code	
E	Internal Code

5

Nominal Inductance	
Example	Nominal Value
2R2	2.2μH
100	10μH

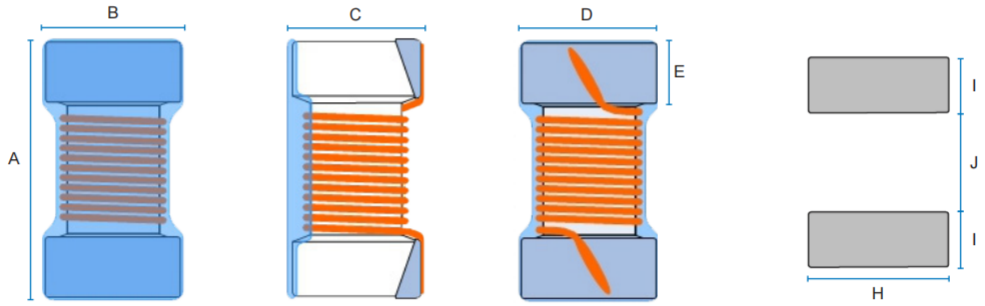
6

Inductance Tolerance	
K	±10%
M	±20%

8

Packing	
B	Bulk Package
T	Tape & Reel

SHAPE AND DIMENSIONS



Series	A	B	C	D Typ.	E Ref.	H Ref.	I Ref.	J Ref.
MWSD1608FE	1.80Max.	1.20Max.	1.00Max.	0.92	0.30	1.15	0.64	0.64
MWSD2012FE	2.40Max.	1.65Max.	1.30Max.	1.28	0.48	1.50	1.02	0.96

Unit: mm

SPECIFICATIONS

MWSD1608FE TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Typ. Self-resonant Frequency	DC Resistance	Typ. Rated Current
Units	μH	-	MHz	MHz	Ω	mA
Symbol	L	-	Freq.	S.R.F	DCR	Ir
MWSD1608FE1R0 ☐ T	1.0	K,M	7.9	340	0.30±30%	700
MWSD1608FE1R8 ☐ T	1.8	K,M	7.9	150	0.50±30%	500
MWSD1608FE2R2 ☐ T	2.2	K,M	7.9	103	0.56±30%	580
MWSD1608FE3R3 ☐ T	3.3	K,M	7.9	65	0.68±30%	450
MWSD1608FE4R7 ☐ T	4.7	K,M	7.9	51	0.97±30%	420
MWSD1608FE6R8 ☐ T	6.8	K,M	7.9	43	1.50±30%	340
MWSD1608FE100 ☐ T	10	K,M	2.5	36	1.85±30%	280
MWSD1608FE150 ☐ T	15	K,M	2.5	29	2.60±30%	240
MWSD1608FE220 ☐ T	22	K,M	2.5	24	2.80±30%	200
MWSD1608FE470 ☐ T	47	K,M	2.5	14	6.65±30%	100

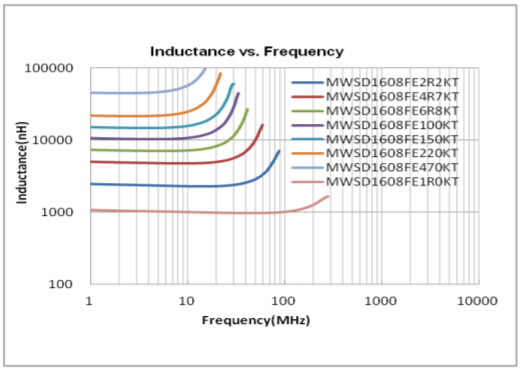
MWSD2012FE TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Typ. Self-resonant Frequency	DC Resistance	Typ. Rated Current
Units	μH	-	MHz	MHz	Ω	mA
Symbol	L	-	Freq.	S.R.F	DCR	Ir
MWSD2012FER68 ☐ T	0.68	K,M	7.9	100	0.24±30%	660
MWSD2012FE2R2 ☐ T	2.2	K,M	7.9	87	0.22±30%	1040
MWSD2012FE3R3 ☐ T	3.3	K,M	7.9	70	0.28±30%	1000
MWSD2012FE4R7 ☐ T	4.7	K,M	7.9	51	0.43±30%	840
MWSD2012FE6R8 ☐ T	6.8	K,M	7.9	46	0.68±30%	700
MWSD2012FE100 ☐ T	10	K,M	2.5	31	0.85±30%	560
MWSD2012FE150 ☐ T	15	K,M	2.5	28	1.40±30%	380
MWSD2012FE180 ☐ T	180	K,M	2.5	27	1.73±30%	200
MWSD2012FE220 ☐ T	22	K,M	2.5	20	1.76±30%	340
MWSD2012FE330 ☐ T	33	K,M	2.5	8	2.00±30%	220
MWSD2012FE470 ☐ T	47	K,M	1.0	15	3.40±30%	280
MWSD2012FE101 ☐ T	100	K,M	1.0	9	7.50±30%	180
MWSD2012FE111 ☐ T	110	K,M	1.0	9	7.50±30%	100

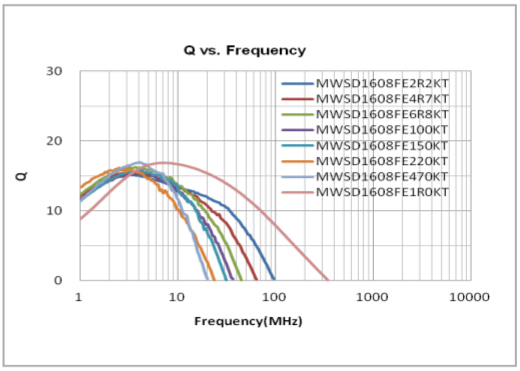
TYPICAL ELECTRICAL CHARACTERISTICS

MWSD1608FE TYPE

Inductance vs. Frequency Characteristics



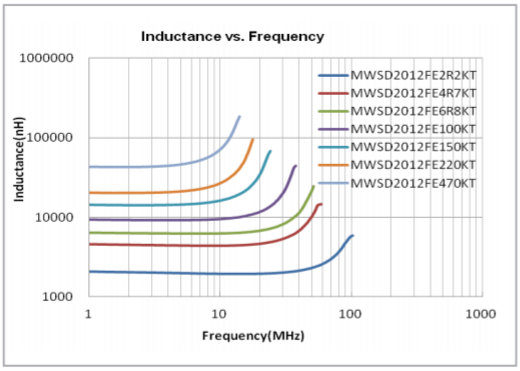
Q vs. Frequency Characteristics



TYPICAL ELECTRICAL CHARACTERISTICS

MWSD2012FE TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics