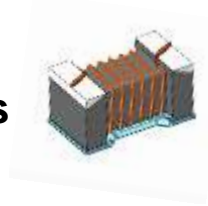


# Wire Wound Chip Ferrite Inductor – MWSD-FE Series

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

**MWSD**

①

**1608**

②

**F**

③

**E**

④

**2R2**

⑤

**□**

⑥

**T**

⑦

①

Type	
MWSD	Wire Wound Chip Inductor

②

External Dimensions (LxW) (mm)	
1608[0603]	1.6x0.8
2012[0805]	2.0x1.25

③

Material Code	
F	Ferrite

④

Internal Code	
E	Internal Code

⑤

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

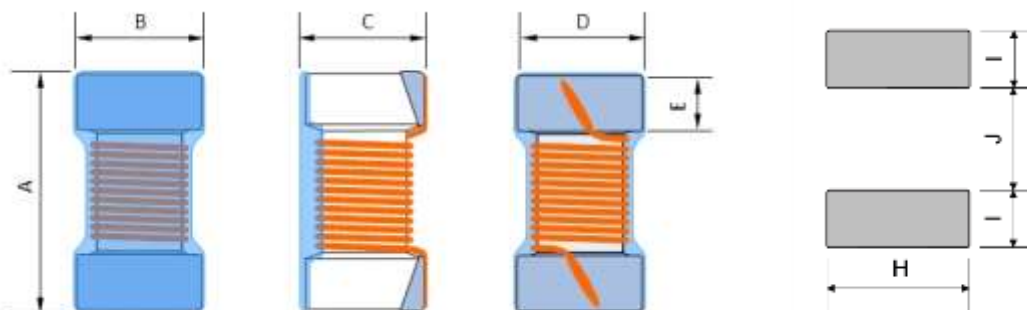
⑥

Inductance Tolerance	
K	±10%
M	±20%

⑦

Packing	
B	Bulk Package
T	Tape & Reel

## SHAPE AND DIMENSIONS



Unit: mm

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

## SPECIFICATIONS

### MWSD1608FE TYPE

Part Number	Inductance	Tolerance	L Test Freq.	Typ. Self-resonant Frequency	DC Resistance	Typ. Rated Current
Units	$\mu\text{H}$	-	MHz	MHz	$\Omega$	mA
Symbol	L	-	Freq.	S.R.F	DCR	I <sub>r</sub>
MWSD1608FE1R0□T	1.0	K,M	7.9	340	0.30±30%	700
MWSD1608FE2R2□T	2.2	K,M	7.9	103	0.56±30%	580
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

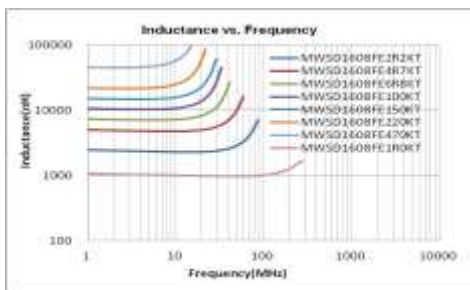
Part Number	Inductance	Tolerance	L Test Freq.	Typ. Self-resonant Frequency	DC Resistance	Typ. Rated Current
Units	$\mu\text{H}$	-	MHz	MHz	$\Omega$	mA
Symbol	L	-	Freq.	S.R.F	DCR	I <sub>r</sub>
MWSD2012FE2R2□T	2.2	K,M	7.9	87	0.22±30%	1040
MWSD2012FE4R7□T	4.7	K,M	7.9	51	0.43±30%	840
MWSD2012FE6R8□T	6.8	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
MWSD2012FE220□T	22	K,M	2.5	20	1.76±30%	340
MWSD2012FE470□T	47	K,M	1	15	3.40±30%	280
MWSD2012FE101□T	100	K,M	1	9	7.50±30%	180

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

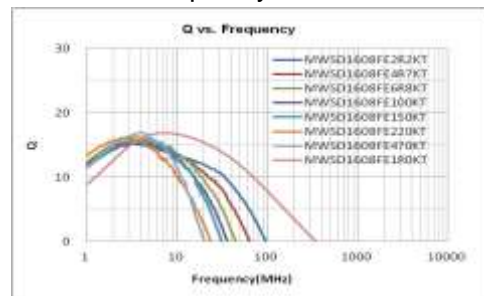
## TYPICAL ELECTRICAL CHARACTERISTICS

### MWSD1608FE TYPE

Inductance vs. Frequency Characteristics

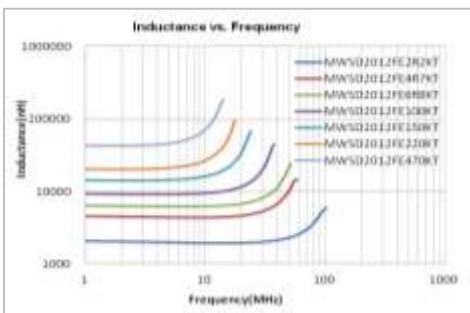


Q vs. Frequency Characteristics



### MWSD2012FE TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

