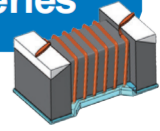


Wire Wound Chip Ferrite Inductor – MWSD – FE Series



Operating Temp ◆ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

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 MWSD	2 1608	3 F	4 E	5 2R2	6 	7 T
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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

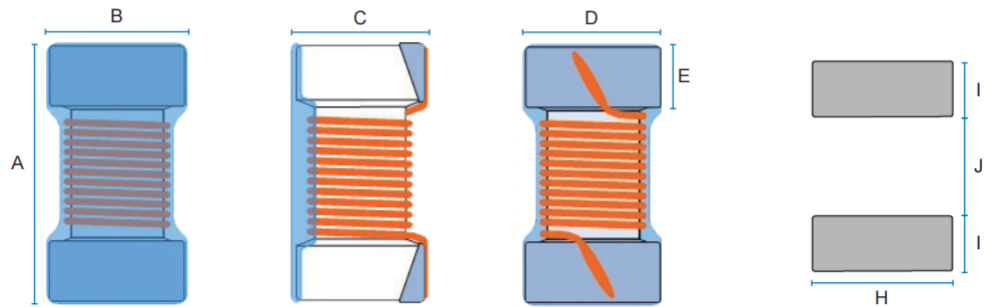
4	Internal Code
E	Internal Code

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

6	Inductance Tolerance
K	±10%
M	±20%

7	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	I _r
MWSD1608FE1R0 □ T	1.0	K,M	7.9	340	$0.30 \pm 30\%$	700
MWSD1608FE1R8 □ T	1.8	K,M	7.9	150	$0.50 \pm 30\%$	500
MWSD1608FE2R2 □ T	2.2	K,M	7.9	103	$0.56 \pm 30\%$	580
MWSD1608FE3R3 □ T	3.3	K,M	7.9	65	$0.68 \pm 30\%$	450
MWSD1608FE4R7 □ T	4.7	K,M	7.9	51	$0.97 \pm 30\%$	420
MWSD1608FE6R8 □ T	6.8	K,M	7.9	43	$1.50 \pm 30\%$	340
MWSD1608FE100 □ T	10	K,M	2.5	36	$1.85 \pm 30\%$	280
MWSD1608FE150 □ T	15	K,M	2.5	29	$2.60 \pm 30\%$	240
MWSD1608FE220 □ T	22	K,M	2.5	24	$2.80 \pm 30\%$	200
MWSD1608FE470 □ T	47	K,M	2.5	14	$6.65 \pm 30\%$	100

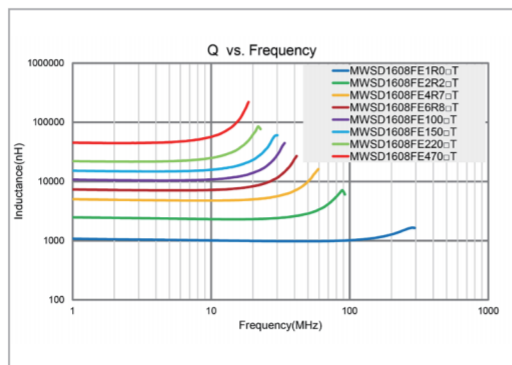
MWSD2012FE TYPE

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	I _r
MWSD2012FER68 □ T	0.68	K,M	7.9	100	$0.24 \pm 30\%$	660
MWSD2012FE2R2 □ T	2.2	K,M	7.9	87	$0.22 \pm 30\%$	1040
MWSD2012FE3R3 □ T	3.3	K,M	7.9	70	$0.28 \pm 30\%$	1000
MWSD2012FE4R7 □ T	4.7	K,M	7.9	51	$0.43 \pm 30\%$	840
MWSD2012FE6R8 □ T	6.8	K,M	7.9	46	$0.68 \pm 30\%$	700
MWSD2012FE100 □ T	10	K,M	2.5	31	$0.85 \pm 30\%$	560
MWSD2012FE150 □ T	15	K,M	2.5	28	$1.40 \pm 30\%$	380
MWSD2012FE180 □ T	180	K,M	2.5	27	$1.73 \pm 30\%$	200
MWSD2012FE220 □ T	22	K,M	2.5	20	$1.76 \pm 30\%$	340
MWSD2012FE330 □ T	33	K,M	2.5	8	$2.00 \pm 30\%$	220
MWSD2012FE470 □ T	47	K,M	1.0	15	$3.40 \pm 30\%$	280
MWSD2012FE101 □ T	100	K,M	1.0	9	$7.50 \pm 30\%$	180
MWSD2012FE111 □ T	110	K,M	1.0	9	$7.50 \pm 30\%$	100

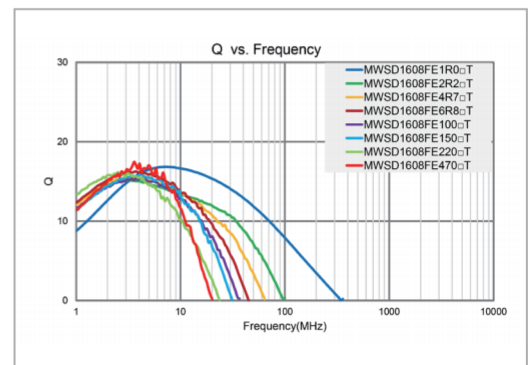
Typical Electrical Characteristics

MWSD1608FE TYPE

Inductance vs. Frequency Characteristics



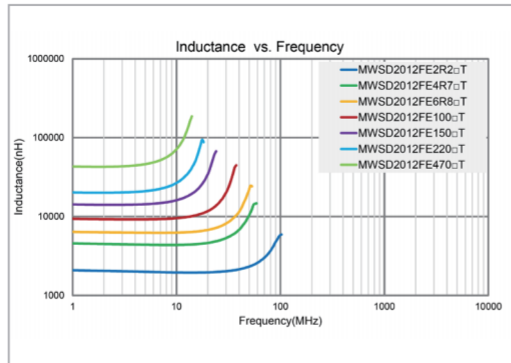
Q vs. Frequency Characteristics



Typical Electrical Characteristics

MWSD2012FE TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

