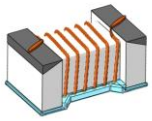
Wire Wound Chip Ceramic Inductor
-MWSD-CP/CH Series

Operating Temp. : -40℃~+125℃



FEATURES

- Small chip suitable for surface mounting
- High Q value and high self-resonant frequency with ceramic material
- Tight inductance tolerance and stable inductance at high frequency
- Lower DCR, higher Q and larger current than MWSD-C series
- Inductance of MWSD-CH series is larger than MWSD-CP series

APPLICATIONS

- High frequency circuit in telecommunication and other equipments
- Mobile phones such as GSM, CDMA, TD-LTE, FDD-LTE, PDC, 5GNR, etc.
- Bluetooth, W-LAN, Broadband network

PRODUCT IDENTIFICATION

MWSD	1005	C	P	10N	J	S	T	F
①	②	③	④	⑤	⑥	⑦	⑧	⑨

①

Type	
MWSD	Wire Wound Chip Inductor

②

External Dimensions
1005 [0402]

③

Material Code	
C	Ceramic

④

Feature Type	
P	Large Current & High Q
H	Large Inductance &Large Current & High Q

⑤

Nominal Inductance	
Example	Nominal Value
10N	10nH
R10	100nH
1R0	1.0μH

⑥

Inductance Tolerance	
B	±0.1nH
C	±0.2nH
S	±0.3nH
D	±0.5nH
G	±2%
H	±3%
J	±5%
K	±10%

⑦

Feature Type	
S	Sn Plating Five-faces Coating

⑧

Packing	
T	Tape & Reel

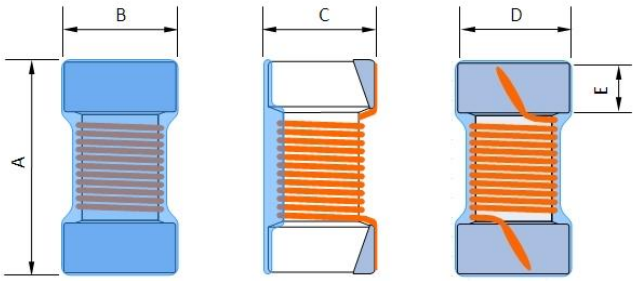
⑨

Hazardous Substance Free Products
F

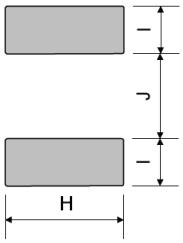
Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com

SHAPE AND DIMENSIONS

MWSD-CP/CH



Land Pattern



Unit: mm

Series	A	B	C	D	E	H Ref.	I Ref.	J Ref.
MWSD1005CP	1.10±0.1	0.6±0.1	0.6±0.1	0.5±0.1	0.2±0.1	0.65	0.35	0.50
MWSD1005CH	1.10±0.1	0.6±0.1	0.6±0.1	0.5±0.1	0.15±0.1	0.65	0.35	0.50

SPECIFICATIONS

MWSD1005CP TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	-	MHz	Ω	mA	GHz
Symbol	L	-	Q	Freq.	DCR	Ir	S.R.F
MWSD1005CP1N0☐T	1.0	C,S,D	20	250	0.030	2300	16.0
MWSD1005CP2N0☐T	2.0	B,C,S,D,J,K	24	250	0.038	2100	15.2
MWSD1005CP2N2☐T	2.2	C,S,D,J,K	25	250	0.038	2100	15.1
MWSD1005CP2N4☐T	2.4	S,D	23	250	0.042	2000	14.0
MWSD1005CP2N7☐T	2.7	C,S,D,J,K	24	250	0.056	1500	13.0
MWSD1005CP3N3☐T	3.3	B,C,S,D,J,K	28	250	0.045	1700	12.8
MWSD1005CP3N6☐T	3.6	C,S,D,J,K	28	250	0.045	1700	11.7
MWSD1005CP3N9☐T	3.9	C,S,D,J,K	28	250	0.045	1700	9.50
MWSD1005CP4N3☐T	4.3	B,S,D,J,K	27	250	0.050	1600	7.15
MWSD1005CP4N7☐T	4.7	S,D,J,K	23	250	0.075	1500	6.85
MWSD1005CP5N1☐T	5.1	B,S,D,J,K	20	250	0.100	1200	6.80
MWSD1005CP5N6☐T	5.6	B,S,D,J,K	29	250	0.048	1600	6.50
MWSD1005CP6N2☐T	6.2	B,S,D,J,K	29	250	0.050	1600	5.80
MWSD1005CP6N8☐T	6.8	G,H,J,K	28	250	0.070	1500	5.80
MWSD1005CP7N5☐T	7.5	G,H,J,K	26	250	0.080	1400	5.40
MWSD1005CP8N2☐T	8.2	G,H,J,K	28	250	0.065	1500	5.40
MWSD1005CP8N7☐T	8.7	G,H,J,K	29	250	0.070	1500	5.00
MWSD1005CP9N0☐T	9.0	G,H,J,K	27	250	0.080	1400	5.00
MWSD1005CP9N5☐T	9.5	G,H,J,K	28	250	0.075	1400	4.70
MWSD1005CP10N☐T	10	G,H,J,K	26	250	0.085	1300	4.70
MWSD1005CP11N☐T	11	G,H,J,K	29	250	0.070	1400	4.70
MWSD1005CP12N☐T	12	G,H,J,K	28	250	0.100	1200	4.40
MWSD1005CP13N☐T	13	G,H,J,K	27	250	0.140	870	4.20
MWSD1005CP15N☐T	15	G,H,J,K	28	250	0.115	1100	3.90
MWSD1005CP16N☐T	16	G,H,J,K	27	250	0.130	850	3.70
MWSD1005CP17N☐T	17	G,H,J,K	26	250	0.230	650	3.70
MWSD1005CP18N☐T	18	G,H,J,K	26	250	0.120	900	3.55
MWSD1005CP19N☐T	19	G,H,J,K	26	250	0.145	850	3.50
MWSD1005CP20N☐T	20	J,K	27	250	0.155	780	3.50
MWSD1005CP21N☐T	21	G,H,J,K	25	250	0.460	450	1.70
MWSD1005CP22N☐T	22	G,H,J,K	28	250	0.190	800	3.30

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SPECIFICATIONS

MWSD1005CP TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	-	MHz	Ω	mA	GHz
Symbol	L	-	Q	Freq.	DCR	Ir	S.R.F
MWSD1005CP23N□T	23	G,H,J,K	28	250	0.160	800	3.30
MWSD1005CP24N□T	24	G,H,J,K	27	250	0.275	700	3.15
MWSD1005CP25N□T	25	G,H,J,K	26	250	0.260	700	3.15
MWSD1005CP26N□T	26	G,H,J,K	27	250	0.275	700	3.15
MWSD1005CP27N□T	27	G,H,J,K	27	250	0.330	450	3.20
MWSD1005CP30N□T	30	G,H,J,K	25	250	0.350	450	2.90
MWSD1005CP33N□T	33	G,H,J,K	28	250	0.330	490	2.80
MWSD1005CP36N□T	36	G,H,J,K	26	250	0.360	480	2.80
MWSD1005CP37N□T	37	G,H,J,K	26	250	0.480	470	2.70
MWSD1005CP39N□T	39	G,H,J,K	28	250	0.430	450	2.60
MWSD1005CP40N□T	40	G,H,J,K	28	250	0.520	450	2.60
MWSD1005CP43N□T	43	G,H,J,K	26	250	0.520	450	2.50
MWSD1005CP47N□T	47	G,H,J,K	28	250	0.580	420	2.40
MWSD1005CP51N□T	51	G,H,J,K	26	250	0.700	360	2.30

MWSD1005CH TYPE

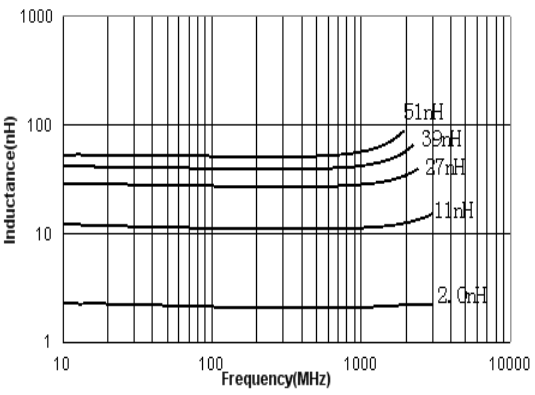
Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	-	MHz	Ω	mA	GHz
Symbol	L	-	Q	Freq.	DCR	Ir	S.R.F
MWSD1005CH56N□T	56	G,H,J,K	31	250	0.900	330	2.07
MWSD1005CH68N□T	68	G,H,J,K	31	250	1.000	320	1.84
MWSD1005CH82N□T	82	G,H,J,K	31	250	1.100	315	1.75
MWSD1005CHR10□T	100	G,H,J,K	30	250	1.200	310	1.58
MWSD1005CHR12□T	120	G,H,J,K	29	250	1.200	310	1.25
MWSD1005CHR15□T	150	G,H,J,K	29	100/250	2.000	240	1.14
MWSD1005CHR16□T	160	G,H,J,K	29	100/250	2.400	240	1.65
MWSD1005CHR18□T	180	G,H,J,K	32	100/250	2.500	240	1.08
MWSD1005CHR22□T	220	G,H,J,K	32	100/250	3.500	160	0.96

※: Please refer to "Measurement Notice For RF Inductors".

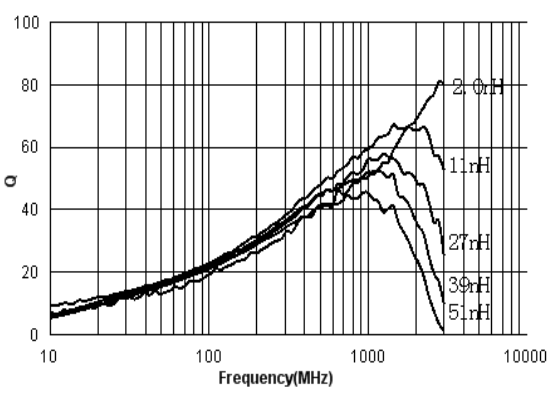
TYPICAL ELECTRICAL CHARACTERISTICS

MWSD1005CP TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

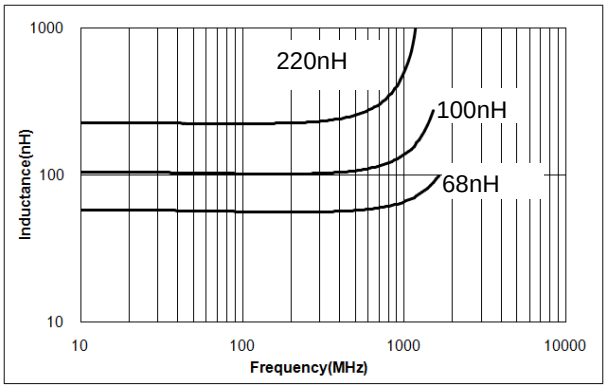


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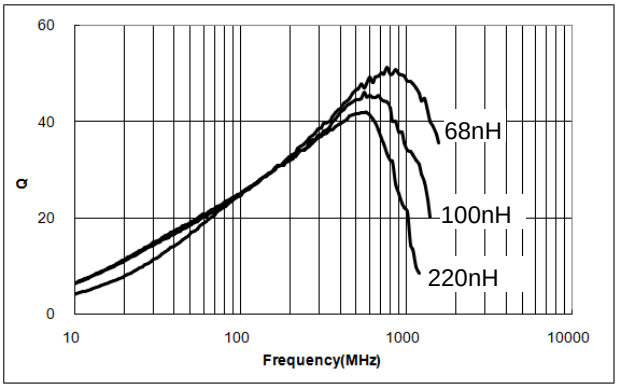
电气特性 TYPICAL ELECTRICAL CHARACTERISTICS

MWSD1005CH TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



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