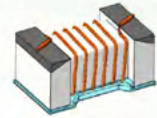


# Wire Wound Chip Ceramic Inductor - MWSD-CP/CH Series



Operating Temp. : -40°C ~+125°C

## 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

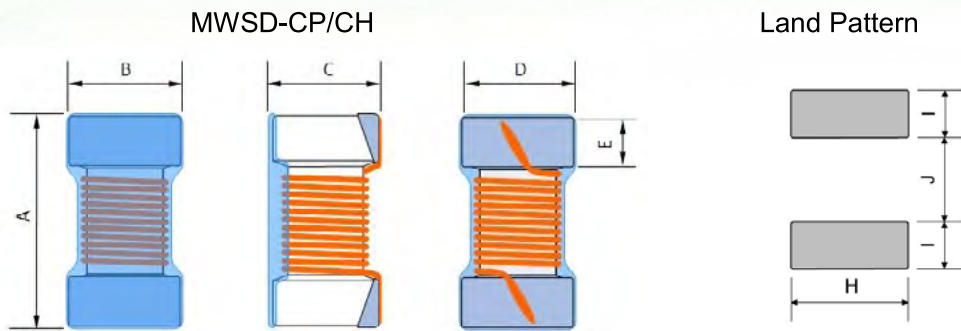
## APPLICATIONS

- High frequency circuit in telecommunication and other equipments
- Mobile phones and other electronic devices
- Bluetooth, W-LAN, Broadband network

## PRODUCT IDENTIFICATION

<u>MWSD</u>	<u>1005</u>	<u>C</u>	<u>P</u>	<u>10N</u>	<u>□</u>	<u>T</u>																																
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## SHAPE AND DIMENSIONS



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

## SPECIFICATIONS

### MWSD1005CP TYPE

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

### MWSD1005CH TYPE

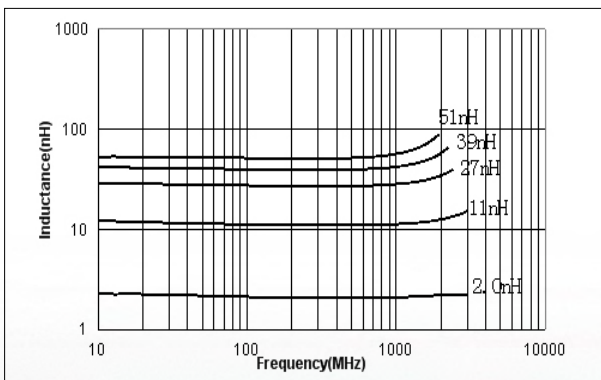
Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	-	MHz	GHz	$\Omega$	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	I <sub>r</sub>
MWSD1005CH56N □ T	56	G,H,J,K	31	250	2.07	0.900	330
MWSD1005CH68N □ T	68	G,H,J,K	31	250	1.84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

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

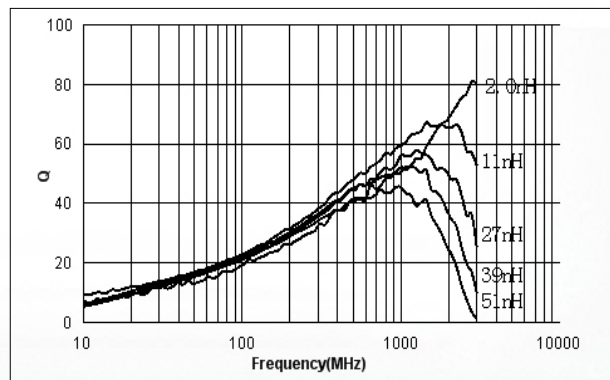
## TYPICAL ELECTRICAL CHARACTERISTICS

### MWSD1005CP TYPE

#### Inductance vs. Frequency Characteristics



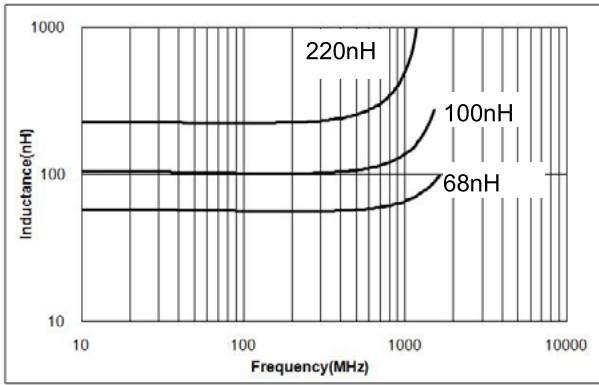
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## TYPICAL ELECTRICAL CHARACTERISTICS

### MWSD1005CH TYPE

#### Inductance vs. Frequency Characteristics



#### Q vs. Frequency Characteristics

