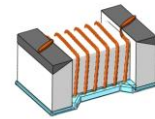


# Wire Wound Chip Ceramic Inductor - MWSD-C-M8X Series

Operating Temp. : -40°C~+125°C



## FEATURES

- Small chip suitable for surface mounting
- High rated current can be applied because of lower DC resistance than MWSD-C-M series
- Tight inductance tolerance and high reliability
- Single-sided package, thinner than SDWL-C-M8X series

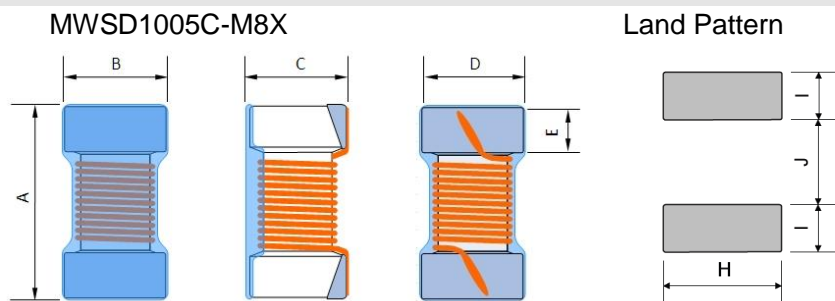
## APPLICATIONS

- 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

<u>MWSD</u> ①	<u>1005</u> ②	<u>C</u> ③	<u>10N</u> ④	<u>S</u> ⑤	<u>T</u> ⑥	<u>M81</u> ⑦																																																
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## SHAPE AND DIMENSIONS



Unit: mm

Series	A	B	C	D	E REF.	H REF.	I REF.	J REF.
MWSD1005C-M8X	1.1±0.1	0.53±0.1	0.6±0.1	0.5±0.1	0.20	0.65	0.35	0.50

# SPECIFICATIONS

## MWSD1005C -M81 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	$\Omega$	mA	GHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
MWSD1005C1N3□TM81	1.3	C,S,D,K	20	100/250	0.012	3150	18.0
MWSD1005C1N5□TM81	1.5	B,C,S,D,K	20	100/250	0.028	2100	18.0
MWSD1005C1N6□TM81	1.6	B,C,S,D,K	20	100/250	0.045	1450	18.0
MWSD1005C1N7□TM81	1.7	B,C,S,D,K	20	100/250	0.065	1150	18.0
MWSD1005C1N8□TM81	1.8	B,C,S,D,K	20	100/250	0.065	1150	18.0
MWSD1005C2N2□TM81	2.2	B,C,S,D,K	30	100/250	0.022	2530	15.5
MWSD1005C2N3□TM81	2.3	B,C,S,D,K	30	100/250	0.022	2530	15.5
MWSD1005C2N4□TM81	2.4	B,C,S,D,K	30	100/250	0.022	2530	15.5
MWSD1005C2N5□TM81	2.5	B,C,S,D,K	30	100/250	0.030	2100	15.5
MWSD1005C2N6□TM81	2.6	B,C,S,D,K	30	100/250	0.035	1950	14.5
MWSD1005C2N7□TM81	2.7	B,C,S,D,K	28	100/250	0.047	1500	14.0
MWSD1005C2N8□TM81	2.8	B,C,S,D,K	27	100/250	0.047	1500	13.5
MWSD1005C2N9□TM81	2.9	B,C,S,D,K	25	100/250	0.047	1500	12.5
MWSD1005C3N0□TM81	3.0	B,C,S,D,K	20	100/250	0.063	1350	12.5
MWSD1005C3N3□TM81	3.3	B,C,S,D,K	30	100/250	0.030	2000	14.0
MWSD1005C3N4□TM81	3.4	B,C,S,D,J,K	30	100/250	0.030	1950	10.0
MWSD1005C3N5□TM81	3.5	B,C,S,D,J,K	30	100/250	0.030	1950	10.0
MWSD1005C3N6□TM81	3.6	B,C,S,D,J,K	30	100/250	0.030	1950	10.0
MWSD1005C3N7□TM81	3.7	B,C,S,D,J,K	35	100/250	0.030	1950	10.0
MWSD1005C3N8□TM81	3.8	B,C,S,D,J,K	35	100/250	0.030	1950	10.0
MWSD1005C3N9□TM81	3.9	B,C,S,D,J,K	35	100/250	0.030	1950	10.0
MWSD1005C4N0□TM81	4.0	B,C,S,D,J,K	30	100/250	0.030	1950	10.0
MWSD1005C4N1□TM81	4.1	B,C,S,D,J,K	30	100/250	0.044	1800	9.6
MWSD1005C4N2□TM81	4.2	B,C,S,D,J,K	30	100/250	0.044	1800	9.6
MWSD1005C4N3□TM81	4.3	B,C,S,D,J,K	32	100/250	0.044	1800	9.6
MWSD1005C4N4□TM81	4.4	B,C,S,D,J,K	34	100/250	0.052	1600	9.6
MWSD1005C4N5□TM81	4.5	B,C,S,D,J,K	34	100/250	0.060	1450	9.6
MWSD1005C4N6□TM81	4.6	B,C,S,D,J,K	32	100/250	0.060	1450	9.6
MWSD1005C4N7□TM81	4.7	B,C,S,D,J,K	31	100/250	0.071	1200	8.0
MWSD1005C4N8□TM81	4.8	B,C,S,D,J,K	30	100/250	0.071	1200	8.0
MWSD1005C4N9□TM81	4.9	B,C,S,D,J,K	27	100/250	0.071	1200	8.0
MWSD1005C5N0□TM81	5.0	B,C,S,D,J,K	32	100/250	0.040	1770	10.0
MWSD1005C5N1□TM81	5.1	B,C,S,D,J,K	35	100/250	0.040	1770	8.0
MWSD1005C5N2□TM81	5.2	B,C,S,D,J,K	35	100/250	0.040	1770	8.0
MWSD1005C5N3□TM81	5.3	B,C,S,D,J,K	35	100/250	0.040	1770	8.0
MWSD1005C5N4□TM81	5.4	B,C,S,D,J,K	35	100/250	0.040	1770	8.0
MWSD1005C5N5□TM81	5.5	B,C,S,D,J,K	35	100/250	0.040	1770	8.0
MWSD1005C5N6□TM81	5.6	B,C,S,D,J,K	35	100/250	0.040	1770	8.0
MWSD1005C5N7□TM81	5.7	B,C,S,D,J,K	30	100/250	0.040	1770	8.0
MWSD1005C5N8□TM81	5.8	B,C,S,D,J,K	30	100/250	0.040	1770	8.0
MWSD1005C5N9□TM81	5.9	B,C,S,D,J,K	30	100/250	0.040	1770	8.0
MWSD1005C6N0□TM81	6.0	B,C,S,D,J,K	32	100/250	0.056	1600	8.0
MWSD1005C6N1□TM81	6.1	B,C,S,D,J,K	32	100/250	0.056	1600	8.0
MWSD1005C6N2□TM81	6.2	B,C,S,D,J,K	33	100/250	0.056	1600	8.0
MWSD1005C6N3□TM81	6.3	G,H,J,K	33	100/250	0.057	1600	7.8
MWSD1005C6N4□TM81	6.4	G,H,J,K	33	100/250	0.065	1380	7.0
MWSD1005C6N5□TM81	6.5	G,H,J,K	32	100/250	0.065	1380	7.0
MWSD1005C6N6□TM81	6.6	G,H,J,K	30	100/250	0.078	1280	7.0

# SPECIFICATIONS

## MWSD1005C -M81 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	$\Omega$	mA	GHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
MWSD1005C6N7□TM81	6.7	G,H,J,K	30	100/250	0.078	1280	7.0
MWSD1005C6N8□TM81	6.8	G,H,J,K	30	100/250	0.068	1450	7.0
MWSD1005C6N9□TM81	6.9	G,H,J,K	32	100/250	0.069	1420	8.5
MWSD1005C7N0□TM81	7.0	G,H,J,K	33	100/250	0.069	1420	8.0
MWSD1005C7N1□TM81	7.1	G,H,J,K	32	100/250	0.069	1420	8.0
MWSD1005C7N2□TM81	7.2	G,H,J,K	32	100/250	0.050	1700	7.0
MWSD1005C7N3□TM81	7.3	G,H,J,K	32	100/250	0.050	1700	7.0
MWSD1005C7N4□TM81	7.4	G,H,J,K	30	100/250	0.050	1700	7.0
MWSD1005C7N5□TM81	7.5	G,H,J,K	35	100/250	0.050	1700	7.0
MWSD1005C7N6□TM81	7.6	G,H,J,K	30	100/250	0.050	1700	7.0
MWSD1005C7N7□TM81	7.7	G,H,J,K	30	100/250	0.050	1700	7.0
MWSD1005C7N8□TM81	7.8	G,H,J,K	30	100/250	0.050	1700	7.0
MWSD1005C7N9□TM81	7.9	G,H,J,K	30	100/250	0.050	1700	7.0
MWSD1005C8N0□TM81	8.0	G,H,J,K	30	100/250	0.050	1700	7.0
MWSD1005C8N1□TM81	8.1	G,H,J,K	32	100/250	0.069	1500	6.5
MWSD1005C8N2□TM81	8.2	G,H,J,K	32	100/250	0.069	1500	6.5
MWSD1005C8N3□TM81	8.3	G,H,J,K	32	100/250	0.069	1500	6.5
MWSD1005C8N4□TM81	8.4	G,H,J,K	32	100/250	0.069	1500	6.5
MWSD1005C8N5□TM81	8.5	G,H,J,K	32	100/250	0.069	1500	6.5
MWSD1005C8N6□TM81	8.6	G,H,J,K	31	100/250	0.070	1420	6.5
MWSD1005C8N7□TM81	8.7	G,H,J,K	31	100/250	0.070	1420	6.5
MWSD1005C8N8□TM81	8.8	G,H,J,K	31	100/250	0.070	1420	6.5
MWSD1005C8N9□TM81	8.9	G,H,J,K	31	100/250	0.070	1420	6.5
MWSD1005C9N0□TM81	9.0	G,H,J,K	31	100/250	0.070	1500	6.5
MWSD1005C9N1□TM81	9.1	G,H,J,K	32	100/250	0.080	1400	6.5
MWSD1005C9N2□TM81	9.2	G,H,J,K	32	100/250	0.081	1400	6.0
MWSD1005C9N3□TM81	9.3	G,H,J,K	34	100/250	0.081	1400	6.0
MWSD1005C9N4□TM81	9.4	G,H,J,K	33	100/250	0.081	1400	6.0
MWSD1005C9N5□TM81	9.5	G,H,J,K	32	100/250	0.081	1400	6.0
MWSD1005C9N6□TM81	9.6	G,H,J,K	33	100/250	0.081	1400	6.0
MWSD1005C9N7□TM81	9.7	G,H,J,K	33	100/250	0.081	1400	6.0
MWSD1005C9N8□TM81	9.8	G,H,J,K	34	100/250	0.081	1400	6.0
MWSD1005C9N9□TM81	9.9	G,H,J,K	32	100/250	0.081	1400	6.0
MWSD1005C10N□TM81	10	G,H,J,K	31	100/250	0.081	1400	6.0
MWSD1005C11N□TM81	11	G,H,J,K	32	100/250	0.083	1400	6.2
MWSD1005C12N□TM81	12	G,H,J,K	30	100/250	0.093	1240	5.2
MWSD1005C13N□TM81	13	G,H,J,K	30	100/250	0.093	1240	5.2
MWSD1005C14N□TM81	14	G,H,J,K	31	100/250	0.111	1150	5.2
MWSD1005C15N□TM81	15	G,H,J,K	31	100/250	0.114	1150	5.5
MWSD1005C16N□TM81	16	G,H,J,K	31	100/250	0.126	1000	5.0
MWSD1005C17N□TM81	17	G,H,J,K	31	100/250	0.130	1000	5.2
MWSD1005C18N□TM81	18	G,H,J,K	30	100/250	0.156	1050	5.5
MWSD1005C19N□TM81	19	G,H,J,K	30	100/250	0.126	920	5.0
MWSD1005C20N□TM81	20	G,H,J,K	30	100/250	0.186	800	4.5
MWSD1005C21N□TM81	21	G,H,J,K	30	100/250	0.202	780	4.5
MWSD1005C22N□TM81	22	G,H,J,K	30	100/250	0.202	780	4.5
MWSD1005C23N□TM81	23	G,H,J,K	29	100/250	0.201	760	4.5
MWSD1005C24N□TM81	24	G,H,J,K	31	100/250	0.212	770	4.0

## SPECIFICATIONS

### MWSD1005C -M81 TYPE

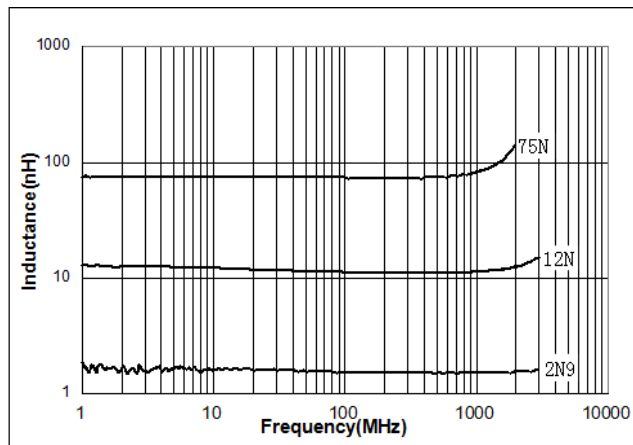
Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	-	MHz	$\Omega$	mA	GHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
MWSD1005C25N□TM81	25	G,H,J,K	31	100/250	0.221	750	4.1
MWSD1005C26N□TM81	26	G,H,J,K	29	100/250	0.282	720	4.1
MWSD1005C27N□TM81	27	G,H,J,K	30	100/250	0.288	680	4.0
MWSD1005C30N□TM81	30	G,H,J,K	30	100/250	0.309	660	3.8
MWSD1005C33N□TM81	33	G,H,J,K	30	100/250	0.336	620	3.6
MWSD1005C36N□TM81	36	G,H,J,K	30	100/250	0.431	540	3.5
MWSD1005C39N□TM81	39	G,H,J,K	28	100/250	0.456	530	3.4
MWSD1005C43N□TM81	43	G,H,J,K	30	100/250	0.516	515	3.4
MWSD1005C47N□TM81	47	G,H,J,K	25	100/250	0.648	440	3.2
MWSD1005C51N□TM81	51	G,H,J,K	25	100/250	0.696	415	2.9
MWSD1005C53N□TM81	53	G,H,J,K	25	100/200	0.696	415	2.9
MWSD1005C56N□TM81	56	G,H,J,K	25	100/200	0.996	340	2.9
MWSD1005C68N□TM81	68	G,H,J,K	25	100/250	1.128	320	2.5
MWSD1005C75N□TM81	75	G,H,J,K	25	100/200	1.224	320	2.4

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

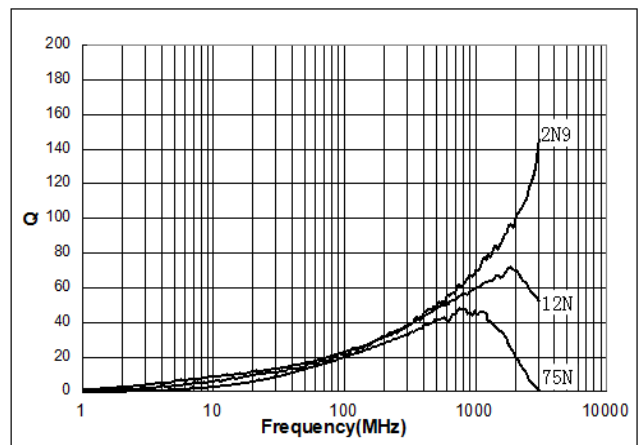
## TYPICAL ELECTRICAL CHARACTERISTICS

### MWSD1005C-M81 TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



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[MLZ1608M150WTD25](#) [MLZ1608M3R3WTD25](#) [MLZ1608M3R3WT000](#) [MLZ1608M150WT000](#) [MLZ1608A1R5WT000](#)  
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[CR32NP-8R2MC](#) [CR43NP-390KC](#) [CR43NP-560KC](#) [CR43NP-680KC](#) [CR54NP-181KC](#) [CR54NP-470LC](#) [CR54NP-820KC](#) [CR54NP-8R5MC](#)  
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