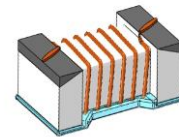


Wire Wound Chip Ceramic Inductor - MWSD-C-M Series

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 high reliability
- Single-sided package, thinner than SDWL-C-M series

APPLICATIONS

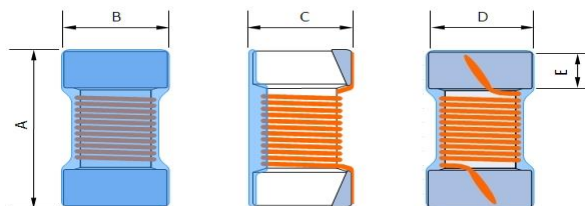
- High frequency circuit in telecommunication and other equipments
- Mobile phones and other electronic devices
- Bluetooth, W-LAN, Broadband network

PRODUCT IDENTIFICATION

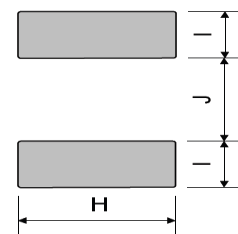
<u>MWSD</u> ①	<u>1005</u> ②	<u>C</u> ③	<u>10N</u> ④	<u>S</u> ⑤	<u>T</u> ⑥	<u>M01</u> ⑦																																																
<table border="1"> <tr><th colspan="2">Type</th></tr> <tr><td>MWSD</td><td>Wire Wound Chip Inductor</td></tr> </table>	Type		MWSD	Wire Wound Chip Inductor	<table border="1"> <tr><th colspan="2">External Dimensions</th></tr> <tr><td colspan="2">1005 [0402]</td></tr> </table>	External Dimensions		1005 [0402]		<table border="1"> <tr><th colspan="2">Material Code</th></tr> <tr><td>C</td><td>Ceramic</td></tr> </table>	Material Code		C	Ceramic	<table border="1"> <tr><th colspan="2">Nominal Inductance</th></tr> <tr><th>Example</th><th>Nominal Value</th></tr> <tr><td>4N7</td><td>4.7nH</td></tr> <tr><td>10N</td><td>10nH</td></tr> <tr><td>R10</td><td>100nH</td></tr> </table>	Nominal Inductance		Example	Nominal Value	4N7	4.7nH	10N	10nH	R10	100nH	<table border="1"> <tr><th colspan="2">Inductance Tolerance</th></tr> <tr><td>B</td><td>±0.1nH</td></tr> <tr><td>C</td><td>±0.2nH</td></tr> <tr><td>S</td><td>±0.3nH</td></tr> <tr><td>D</td><td>±0.5nH</td></tr> <tr><td>G</td><td>±2%</td></tr> <tr><td>H</td><td>±3%</td></tr> <tr><td>J</td><td>±5%</td></tr> </table>	Inductance Tolerance		B	±0.1nH	C	±0.2nH	S	±0.3nH	D	±0.5nH	G	±2%	H	±3%	J	±5%	<table border="1"> <tr><th colspan="2">Packing</th></tr> <tr><td>B</td><td>Bulk Package</td></tr> <tr><td>T</td><td>Tape & Reel</td></tr> </table>	Packing		B	Bulk Package	T	Tape & Reel	<table border="1"> <tr><th colspan="2">Internal Code</th></tr> <tr><td>M01/M11</td><td>Internal Code</td></tr> </table>	Internal Code		M01/M11	Internal Code
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SHAPE AND DIMENSIONS

MWSD1005C-M



Land Pattern



Unit: mm

Series	A	B	C	D	E	H REF.	I REF.	J REF.
MWSD1005C-M	1.1±0.1	0.6±0.1	0.55±0.1	0.5±0.1	0.2±0.1	0.65	0.35	0.50

SPECIFICATIONS

MWSD1005C -M01 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	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	I _r
MWSD1005C1N5□TM01	1.5	B,C,D	10	100/250	>6000	0.03	1000
MWSD1005C1N6□TM01	1.6	C,D	10	100/250	>6000	0.07	750
MWSD1005C1N7□TM01	1.7	C,D	10	100/250	>6000	0.10	640
MWSD1005C1N8□TM01	1.8	C,D	10	100/250	>6000	0.16	460
MWSD1005C2N4□TM01	2.4	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N5□TM01	2.5	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N6□TM01	2.6	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N7□TM01	2.7	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N8□TM01	2.8	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N9□TM01	2.9	B,C,D	20	100/250	>6000	0.07	750
MWSD1005C3N0□TM01	3.0	B,C,D	20	100/250	>6000	0.07	750
MWSD1005C3N1□TM01	3.1	B,C,D	20	100/250	>6000	0.13	570
MWSD1005C3N2□TM01	3.2	B,C,D	15	100/250	>6000	0.17	500
MWSD1005C3N9□TM01	3.9	C,D	25	100/250	>6000	0.07	750
MWSD1005C4N1□TM01	4.1	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N3□TM01	4.3	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N4□TM01	4.4	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N5□TM01	4.5	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N6□TM01	4.6	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N7□TM01	4.7	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N8□TM01	4.8	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N9□TM01	4.9	B,C,D	25	100/250	>6000	0.12	600
MWSD1005C5N0□TM01	5.0	B,C,D	25	100/250	>6000	0.12	600
MWSD1005C5N1□TM01	5.1	B,C,D	25	100/250	>6000	0.12	600
MWSD1005C5N8□TM01	5.8	B,C,D	25	100/250	>6000	0.12	700
MWSD1005C6N2□TM01	6.2	B,C,D	25	100/250	>6000	0.09	700
MWSD1005C6N3□TM01	6.3	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N4□TM01	6.4	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N5□TM01	6.5	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N6□TM01	6.6	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N7□TM01	6.7	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N8□TM01	6.8	G,H,J	25	100/250	6000	0.09	700
MWSD1005C6N9□TM01	6.9	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N0□TM01	7.0	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N1□TM01	7.1	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N2□TM01	7.2	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N3□TM01	7.3	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N5□TM01	7.5	G,H,J	25	100/250	6000	0.13	570
MWSD1005C8N2□TM01	8.2	G,H,J	25	100/250	5500	0.14	540
MWSD1005C8N6□TM01	8.6	G,H,J	25	100/250	5500	0.14	540
MWSD1005C8N7□TM01	8.7	G,H,J	25	100/250	5500	0.14	540
MWSD1005C8N8□TM01	8.8	G,H,J	25	100/250	5500	0.14	540
MWSD1005C8N9□TM01	8.9	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N0□TM01	9.0	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N1□TM01	9.1	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N2□TM01	9.2	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N3□TM01	9.3	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N4□TM01	9.4	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N5□TM01	9.5	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N6□TM01	9.6	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N7□TM01	9.7	G,H,J	25	100/250	5500	0.14	540

SPECIFICATIONS

MWSD1005C-M01 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	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	Ir
MWSD1005C9N8□TM01	9.8	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N9□TM01	9.9	G,H,J	25	100/250	5500	0.14	540
MWSD1005C10N□TM01	10	G,H,J	25	100/250	5500	0.17	500
MWSD1005C11N□TM01	11	G,H,J	30	100/250	5500	0.14	500
MWSD1005C12N□TM01	12	G,H,J	30	100/250	5500	0.14	500
MWSD1005C13N□TM01	13	G,H,J	25	100/250	5000	0.21	430
MWSD1005C15N□TM01	15	G,H,J	30	100/250	5000	0.16	460
MWSD1005C16N□TM01	16	G,H,J	25	100/250	4500	0.24	370
MWSD1005C18N□TM01	18	G,H,J	25	100/250	4500	0.27	370
MWSD1005C19N□TM01	19	G,H,J	25	100/250	4500	0.27	370
MWSD1005C20N□TM01	20	G,H,J	25	100/250	4000	0.27	370
MWSD1005C22N□TM01	22	G,H,J	25	100/250	4000	0.30	310
MWSD1005C23N□TM01	23	G,H,J	25	100/250	3800	0.30	310
MWSD1005C24N□TM01	24	G,H,J	25	100/250	3500	0.52	280
MWSD1005C27N□TM01	27	G,H,J	25	100/250	3500	0.52	280
MWSD1005C30N□TM01	30	G,H,J	25	100/250	3300	0.58	270
MWSD1005C33N□TM01	33	G,H,J	25	100/250	3200	0.63	260
MWSD1005C36N□TM01	36	G,H,J	25	100/250	3100	0.63	260
MWSD1005C39N□TM01	39	G,H,J	25	100/250	3000	0.70	250
MWSD1005C40N□TM01	40	G,H,J	25	100/250	3000	0.70	250
MWSD1005C43N□TM01	43	G,H,J	25	100/250	3000	0.70	250
MWSD1005C47N□TM01	47	G,H,J	25	100/200	2900	1.08	210
MWSD1005C51N□TM01	51	G,H,J	25	100/200	2850	1.08	210
MWSD1005C56N□TM01	56	G,H,J	25	100/200	2800	1.17	200
MWSD1005C62N□TM01	62	G,H,J	20	100/200	2600	1.82	145
MWSD1005C68N□TM01	68	G,H,J	20	100/200	2500	1.96	140
MWSD1005C72N□TM01	72	G,H,J	20	100/150	2500	2.10	135
MWSD1005C75N□TM01	75	G,H,J	20	100/150	2400	2.10	135
MWSD1005C82N□TM01	82	G,H,J	20	100/150	2300	2.24	130
MWSD1005C91N□TM01	91	G,H,J	20	100/150	2100	2.38	125
MWSD1005CR10□TM01	100	G,H,J	20	100/150	1500	2.52	120
MWSD1005CR12□TM01	120	G,H,J	20	100/150	1000	2.66	110

MWSD1005C-M11 TYPE

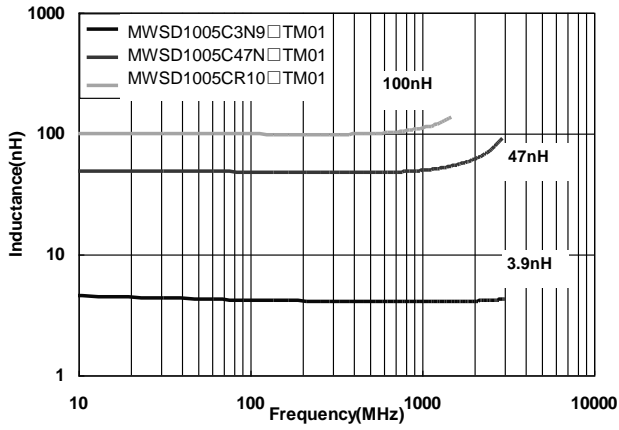
Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	Ir
MWSD1005C1N3□TM11	1.3	C,D	20	100/250	>6000	0.017	1200
MWSD1005C2N2□TM11	2.2	C,D	25	100/250	>6000	0.027	1000
MWSD1005C2N4□TM11	2.4	C,D	25	100/250	>6000	0.027	1000
MWSD1005C3N3□TM11	3.3	C,D	30	100/250	>6000	0.040	900
MWSD1005C3N4□TM11	3.4	C,D	30	100/250	>6000	0.040	900
MWSD1005C3N6□TM11	3.6	C,D	30	100/250	>6000	0.040	900
MWSD1005C3N9□TM11	3.9	C,D	30	100/250	>6000	0.040	900
MWSD1005C4N7□TM11	4.7	C,D	30	100/250	>6000	0.051	800
MWSD1005C5N1□TM11	5.1	D	30	100/250	>6000	0.051	800
MWSD1005C5N6□TM11	5.6	C,D	30	100/250	>6000	0.051	800

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

TYPICAL ELECTRICAL CHARACTERISTICS

MWSD1005C-M TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

