

# Wire Wound Chip Ceramic Inductor – SDWL-C 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

## APPLICATIONS

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

## PRODUCT IDENTIFICATION

①

Type
SDWL Wire Wound Chip t6p 6We3 10.y2p0.y96p84.9680.y2p 0 48.5 1.5105(t6p845.945 )-152.88 1.5 ref2485.94



## SPECIFICATIONS

### SDWL1005C-S 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	MHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL1005C13N□STF	13	G,H,J,K	24	250	0.18	460	5000
SDWL1005C14N□STF	14	G,H,J,K	26	250	0.21	430	5000
SDWL1005C15N□STF	15	G,H,J,K	26	250	0.21	430	5000
SDWL1005C16N□STF	16	G,H,J,K	25	250	0.28	370	4500
SDWL1005C18N□STF	18	G,H,J,K	25	250	0.28	370	4500
SDWL1005C19N□STF	19	G,H,J,K	26	250	0.24	400	4000
SDWL1005C20N□STF	20	G,H,J,K	26	250	0.24	400	4000
SDWL1005C22N□STF	22	G,H,J,K	25	250	0.36	330	4000
SDWL1005C23N□STF	23	G,H,J,K	25	250	0.36	330	3800
SDWL1005C24N□STF	24	G,H,J,K	25	250	0.36	330	3500
SDWL1005C27N□STF	27	G,H,J,K	25	250	0.38	320	3500
SDWL1005C30N□STF	30	G,H,J,K	25	250	0.38	320	3300
SDWL1005C33N□STF	33	G,H,J,K	24	250	0.55	260	3200
SDWL1005C36N□STF	36	G,H,J,K	25	250	0.60	250	3100
SDWL1005C38N□STF	38	G,H,J,K	25	250	0.60	250	3000
SDWL1005C39N□STF	39	G,H,J,K	25	250	0.60	250	3000
SDWL1005C43N□STF	43	G,H,J,K	25	250	0.68	240	3000
SDWL1005C47N□STF	47	G,H,J,K	25	250	0.95	200	2900
SDWL1005C51N□STF	51	G,H,J,K	25	250	0.95	200	2850
SDWL1005C56N□STF	56	G,H,J,K	25	250	1.05	190	2800
SDWL1005C62N□STF	62	G,H,J,K	25	250	1.05	190	2600
SDWL1005C68N□STF	68	G,H,J,K	25	250	1.35	170	2500
SDWL1005C75N□STF	75	G,H,J,K	24	250	1.75	140	2400
SDWL1005C82N□STF	82	G,H,J,K	25	250	1.90	140	2300
SDWL1005C91N□STF	91	G,H,J,K	25	250	1.95	140	2100
SDWL1005CR10□STF	100	G,H,J,K	24	250	2.06	130	1500
SDWL1005CR11□STF	110	G,H,J,K	25	250	2.38	120	1200
SDWL1005CR12□STF	120	G,H,J,K	25	250	2.66	110	1000

### SDWL1608C-S 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	MHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL1608C1N6□STF	1.6	S,D,K	18	250	0.035	1150	>6000
SDWL1608C1N7□STF	1.7	C,S,D,J,K	16	250	0.043	1000	>6000
SDWL1608C1N8□STF	1.8	C,S,D,J,K	18	250	0.043	1000	>6000
SDWL1608C2N2□STF	2.2	S, D,K	13	250	0.150	700	>6000
SDWL1608C2N7□STF	2.7	C,S,D,J,K	25	250	0.043	1000	>6000
SDWL1608C3N3□STF	3.3	C,S,D,J,K	25	250	0.059	850	>6000
SDWL1608C3N6□STF	3.6	C,S,D,J,K	25	250	0.059	850	>6000
SDWL1608C3N9□STF	3.9	C,S,D,J,K	25	250	0.059	850	>6000
SDWL1608C4N3□STF	4.3	C,S,D,J,K	25	250	0.059	850	>6000
SDWL1608C4N7□STF	4.7	C,S,D,J,K	25	250	0.065	800	>6000
SDWL1608C5N1□STF	5.1	C,S,D,J,K	21	250	0.130	600	>6000
SDWL1608C6N2□STF	6.2	C,S,D,J,K	29	250	0.095	700	>6000

## SPECIFICATIONS

SDWL1608C-S TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Min.

## SPECIFICATIONS

### SDWL2012C 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	MHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL2012C2N2□◎TF	2.2	G,H,J,K	40	250/1500	0.10	600	>6000
SDWL2012C3N3□◎TF	3.3	G,H,J,K	25	250/1500	0.20	600	>6000
SDWL2012C6N8□◎TF	6.8	G,H,J,K	40	250/1000	0.11	600	5000
SDWL2012C8N2□◎TF	8.2	G,H,J,K	40	250/1000	0.19	600	4600
SDWL2012C12N□◎TF	12	G,H,J,K	40	250/500	0.15	600	4000
SDWL2012C15N□◎TF	15	G,H,J,K	40	250/500	0.17	600	2900
SDWL2012C18N□◎TF	18	G,H,J,K	50	250/500	0.20	600	3300
SDWL2012C22N□◎TF	22	G,H,J,K	55	250/500	0.22	500	2000
SDWL2012C27N□◎TF	27	G,H,J,K	55	250/500	0.25	500	2500
SDWL2012C33N□◎TF	33	G,H,J,K	60	250/500	0.27	500	2000
SDWL2012C39N□◎TF	39	G,H,J,K	60	250/500	0.29	500	2000
SDWL2012C47N□◎TF	47	G,H,J,K	50	200/500	0.31	500	1600
SDWL2012C56N□◎TF	56	G,H,J,K	55	200/500	0.32	500	1550
SDWL2012C68N□◎TF	68	G,H,J,K	55	200/500	0.38	500	1450
SDWL2012C82N□◎TF	82	G,H,J,K	50	150/500	0.42	400	1300
SDWL2012CR10□◎TF	100	G,H,J,K	50	150/500	0.46	400	1200
SDWL2012CR12□◎TF	120	G,H,J,K	50	150/250	0.51	400	1100
SDWL2012CR15□◎TF	150	G,H,J,K	50	100/250	0.56	400	920
SDWL2012CR18□◎TF	180	G,H,J,K	50	100/250	0.64	400	870
SDWL2012CR22□◎TF	220	G,H,J,K	45	100/250	1.10	400	850
SDWL2012CR27□◎TF	270	G,H,J,K	38	100/250	1.00	350	650
SDWL2012CR33□◎TF	330	G,H,J,K	40	100/250	1.40	310	600
SDWL2012CR39□◎TF	390	G,H,J,K	35	100/250	1.50	290	560
SDWL2012CR47□◎TF	470	G,H,J,K	33	50/100	1.72	250	375
SDWL2012CR56□◎TF	560	G,H,J,K	23	25/50	1.90	230	320
SDWL2012CR62□◎TF	620	G,H,J,K	23	25/50	1.95	200	280
SDWL2012CR68□◎TF	680	G,H,J,K	23	25/50	2.05	190	270
SDWL2012CR75□◎TF	750	G,H,J,K	23	25/50	2.10	180	240
SDWL2012CR82□◎TF	820	G,H,J,K	23	25/50	2.30	180	250
SDWL2012CR91□◎TF	910	G,H,J,K	22	25/50	2.40	160	230
SDWL2012C1R0□◎TF	1000	G,H,J,K	20	25/50	2.50	150	200

### SDWL2520C 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	MHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL2520C4N7□◎TF	4.7	G,H,J,K	50	50/1500	0.11	1000	>6000
SDWL2520C10N□◎TF	10	G,H,J,K	50	50/500	0.08	1000	4100
SDWL2520C12N□◎TF	12	G,H,J,K	50	50/500	0.09	1000	3300
SDWL2520C15N□◎TF	15	G,H,J,K	50	50/500	0.13	1000	2500
SDWL2520C18N□◎TF	18	G,H,J,K	50	50/350	0.11	1000	2500
SDWL2520C22N□◎TF	22	G,H,J,K	55	50/350	0.12	1000	2400
SDWL2520C27N□◎TF	27	G,H,J,K	55	50/350	0.13	1000	1600
SDWL2520C33N□◎TF	33	G,H,J,K	60	50/350	0.14	1000	1600
SDWL2520C39N□◎TF	39	G,H,J,K	50	50/350	0.15	1000	1500
SDWL2520C47N□◎TF	47	G,H,J,K	65	50/350	0.16	1000	1500

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### SDWL2520C 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	MHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL2520C56N□◎TF	56	G,H,J,K	50	50/350	0.18	1000	1300
SDWL2520C68N□◎TF	68	G,H,J,K	65	50/350	0.21	1000	1200
SDWL2520C82N□◎TF	82	G,H,J,K	60	50/350	0.22	1000	800
SDWL2520CR10□◎TF	100	G,H,J,K	60	25/350	0.56	650	1000
SDWL2520CR12□◎TF	120	G,H,J,K	60	25/350	0.63	650	950
SDWL2520CR15□◎TF	150	G,H,J,K	50	25/100	0.62	580	800
SDWL2520CR18□◎TF	180	G,H,J,K	50	25/100	0.70	620	750
SDWL2520CR22□◎TF	220	G,H,J,K	50	25/100	0.80	500	630
SDWL2520CR27□◎TF	270	G,H,J,K	50	25/100	0.91	500	600
SDWL2520CR33□◎TF	330	G,H,J,K	50	25/100	1.05	450	530
SDWL2520CR39□◎TF	390	G,H,J,K	50	25/100	1.12	470	480
SDWL2520CR47□◎TF	470	G,H,J,K	50	25/100	1.19	470	450
SDWL2520CR56□◎TF	560	G,H,J,K	50	25/100	1.33	400	390
SDWL2520CR62□◎TF	620	G,H,J,K	45	25/100	1.40	300	375
SDWL2520CR68□◎TF	680	G,H,J,K	45	25/100	1.47	400	360
SDWL2520CR75□◎TF	750	G,H,J,K	45	25/100	1.54	360	360
SDWL2520CR82□◎TF	820	G,H,J,K	45	25/100	1.61	400	330
SDWL2520CR91□◎TF	910	G,H,J,K	35	25/50	1.68	380	295
SDWL2520C1R0□◎TF	1000	G,H,J,K	35	25/50	1.80	370	270
SDWL2520C1R2□◎TF	1200	G,H,J,K	35	7.9/50	2.0	310	200
SDWL2520C1R5□◎TF	1500	G,H,J,K	28	7.9/50	2.3	330	150
SDWL2520C1R8□◎TF	1800	G,H,J,K	28	7.9/50	2.6	300	120
SDWL2520C2R2□◎TF	2200	G,H,J,K	28	7.9/50	2.8	280	100
SDWL2520C2R7□◎TF	2700	G,H,J,K	22	7.9/25	3.2	290	90
SDWL2520C3R3□◎TF	3300	G,H,J,K	22	7.9/25	3.4	290	70
SDWL2520C3R9□◎TF	3900	G,H,J,K	17	7.9/25	3.6	260	60
SDWL2520C4R7□◎TF	4700	G,H,J,K	20	7.9/25	4.0	260	50
SDWL2520C5R6□◎TF	5600	G,H,J,K	20	7.9/25	5.7	240	40
SDWL2520C6R8□◎TF	6800	G,H,J,K	20	7.9/25	7.7	200	40
SDWL2520C8R2□◎TF	8200	G,H,J,K	20	7.9/25	10.7	150	30

### SDWL3216C 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	MHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL3216C3N3□◎TF	3.3	G,H,J,K	20	100/300	0.07	1000	6200
SDWL3216C6N8□◎TF	6.8	G,H,J,K	30	100/300	0.07	1000	5500
SDWL3216C10N□◎TF	10	G,H,J,K	40	100/300	0.09	1000	4000
SDWL3216C12N□◎TF	12	G,H,J,K	40	100/300	0.09	1000	3200
SDWL3216C15N□◎TF	15	G,H,J,K	40	100/300	0.12	1000	3200
SDWL3216C18N□◎TF	18	G,H,J,K	45	100/300	0.12	1000	2800
SDWL3216C22N□◎TF	22	G,H,J,K	50	100/300	0.12	1000	2200
SDWL3216C27N□◎TF	27	G,H,J,K	50	100/300	0.12	1000	1800
SDWL3216C33N□◎TF	33	G,H,J,K	50	100/300	0.12	1000	1800
SDWL3216C39N□◎TF	39	G,H,J,K	50	100/300	0.12	1000	1800

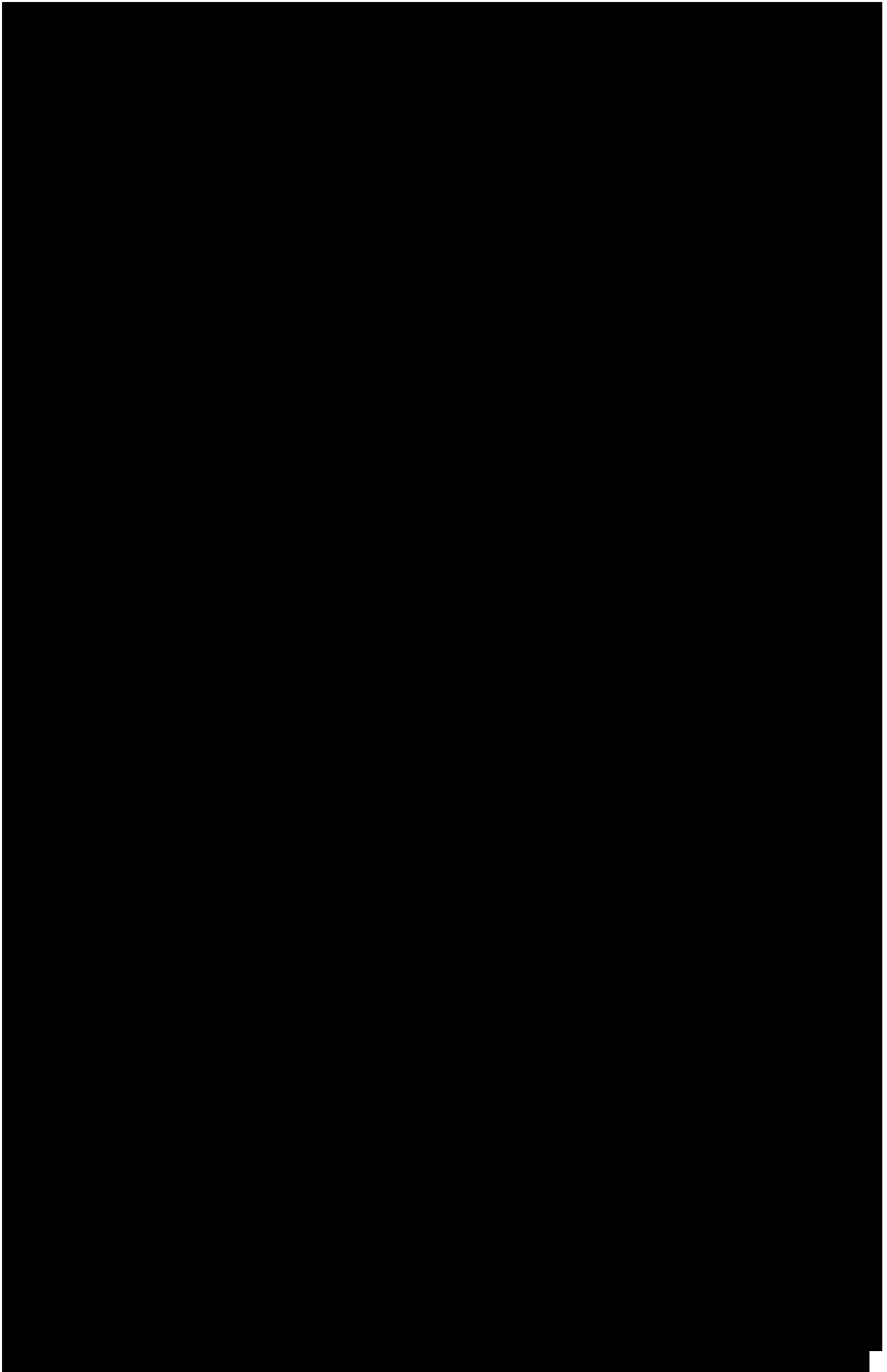
# SPECIFICATIONS

## SDWL3216C 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	MHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL3216C47N□◎TF	47	G,H,J,K	50	100/300	0.13	1000	1500
SDWL3216C56N□◎TF	56	G,H,J,K	55	100/300	0.14	1000	1450
SDWL3216C68N□◎TF	68	G,H,J,K	55	100/300	0.26	900	1200
SDWL3216C82N□◎TF	82	G,H,J,K	55	100/300	0.21	900	1200
SDWL3216CR10□◎TF	100	G,H,J,K	55	100/300	0.30	850	1100
SDWL3216CR12□◎TF	120	G,H,J,K	60	100/300	0.30	800	1100
SDWL3216CR15□◎TF	150	G,H,J,K	55	100/300	0.31	750	950
SDWL3216CR18□◎TF	180	G,H,J,K	60	50/300	0.43	700	900
SDWL3216CR22□◎TF	220	G,H,J,K	60	50/300	0.56	670	760
SDWL3216CR27□◎TF	270	G,H,J,K	50	50/300	0.56	630	730
SDWL3216CR33□◎TF	330	G,H,J,K	45	50/150	0.70	590	650
SDWL3216CR39□◎TF	390	G,H,J,K	45	50/150	0.80	530	600
SDWL3216CR47□◎TF	470	G,H,J,K	45	50/150	1.30	490	550
SDWL3216CR56□◎TF	560	G,H,J,K	45	35/150	1.34	460	470
SDWL3216CR68□◎TF	680	G,H,J,K	45	35/150	1.58	430	450
SDWL3216CR82□◎TF	820	G,H,J,K	45	35/150	1.82	400	420
SDWL3216C1R0□◎TF	1000	G,H,J,K	45	35/150	2.80	320	400
SDWL3216C1R2□◎TF	1200	G,H,J,K	45	35/150	3.20	300	380

## DWL3225C 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	MHz
Symbol	L	-	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL3225C3N9□◎TF	3.9	G,H,J,K	30	100/300	0.05	1000	6000
SDWL3225C5N2□◎TF	5.2	G,H,J,K	30	100/300	0.065	1000	5800
SDWL3225C8N2□◎TF	8.2	G,H,J,K	30	100/300	0.07	1000	5500

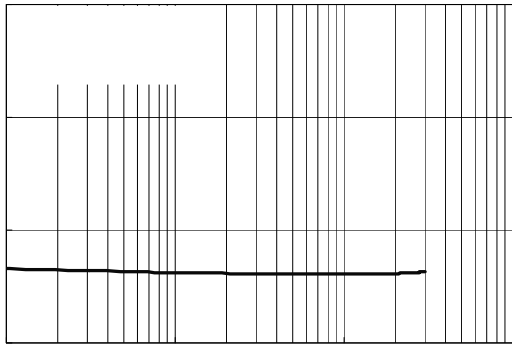




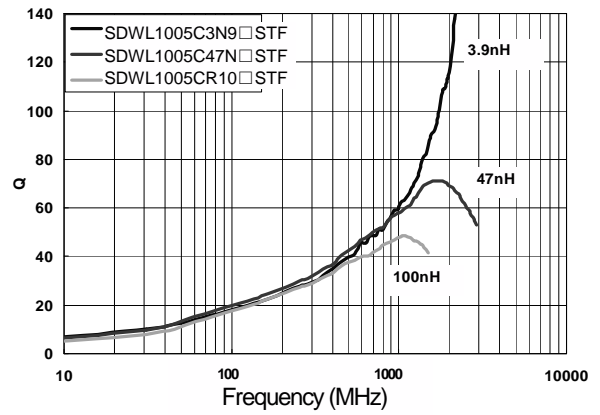
# TYPICAL ELECTRICAL CHARACTERISTICS

## SDWL1005C-S TYPE

Inductance vs. Frequency Characteristics

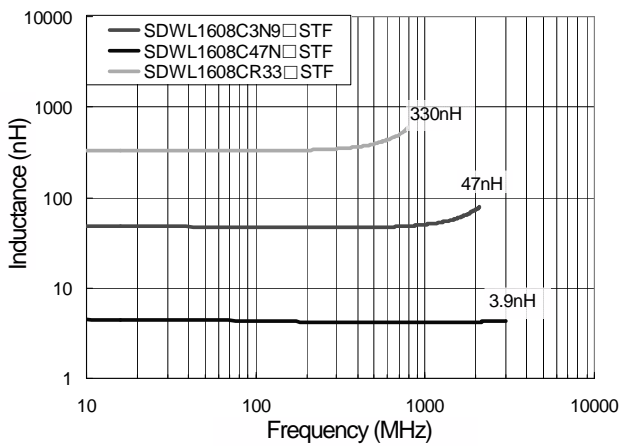


Q vs. Frequency Characteristics

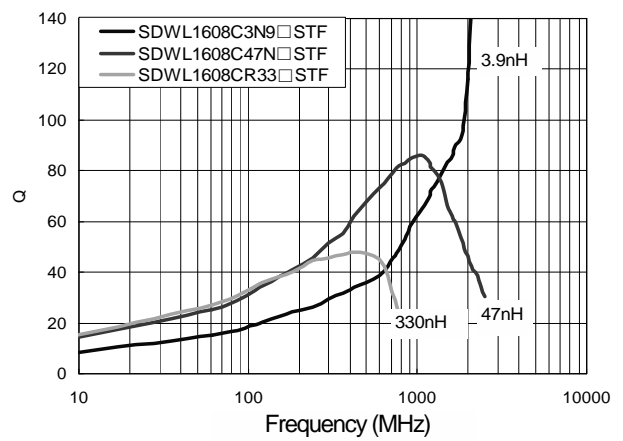


## SDWL1608C-S TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



## SDWL2012C TYPE

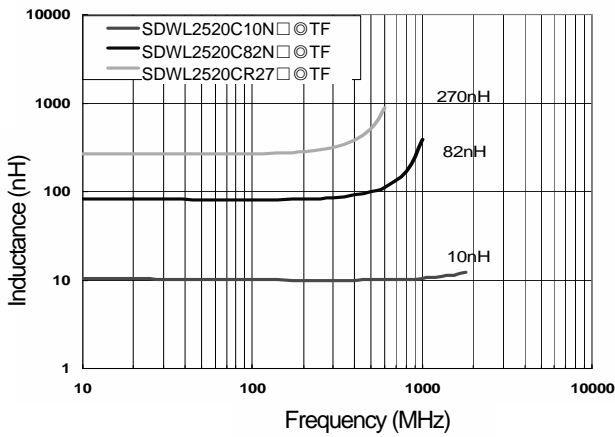
Inductance vs. Frequency Characteristics

Q vs. Frequency Characteristics

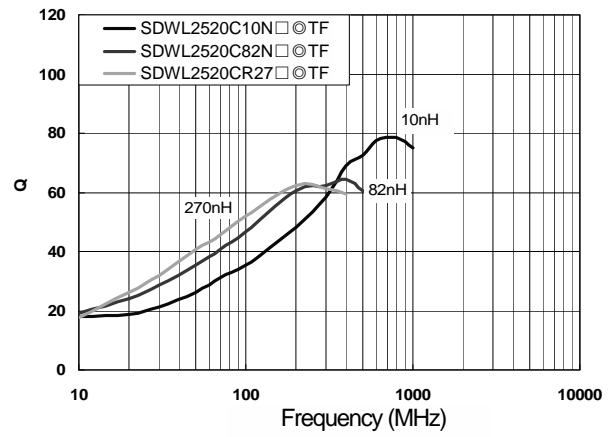
# TYPICAL ELECTRICAL CHARACTERISTICS

## SDWL2520C TYPE

Inductance vs. Frequency Characteristics

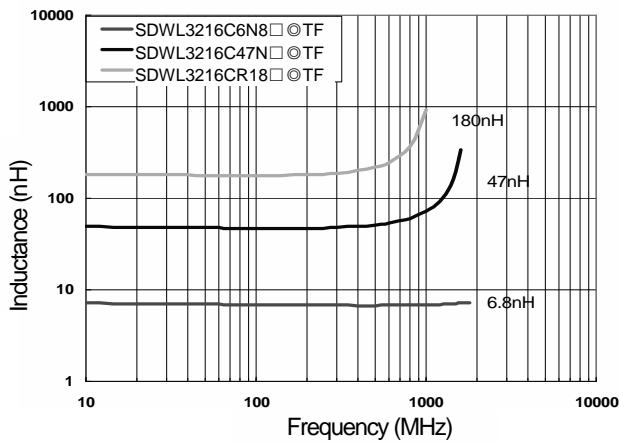


Q vs. Frequency Characteristics

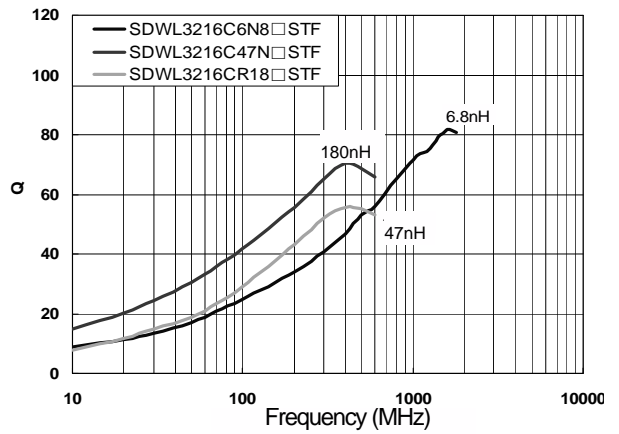


## SDWL3216C TYPE

Inductance vs. Frequency Characteristics

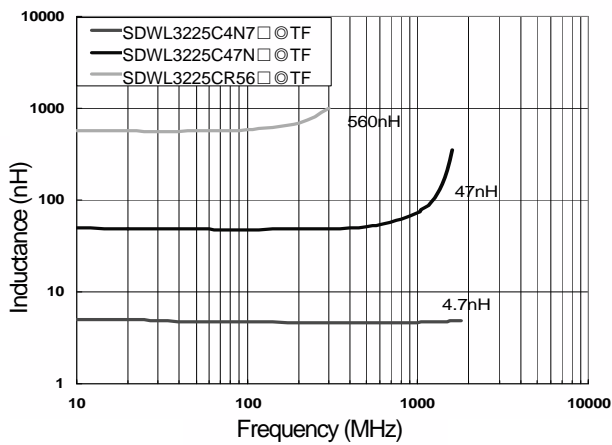


Q vs. Frequency Characteristics

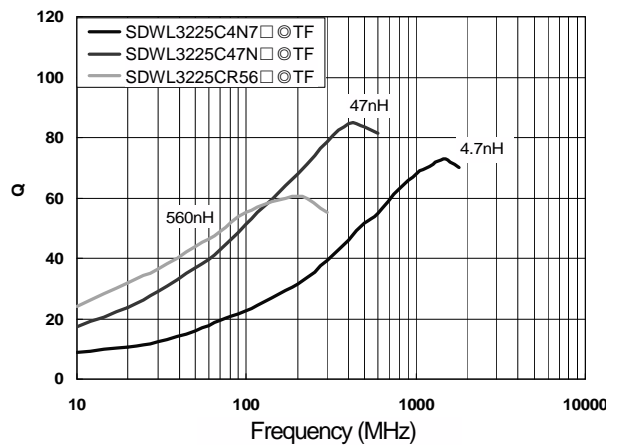


## SDWL3225C TYPE

Inductance vs. Frequency Characteristics



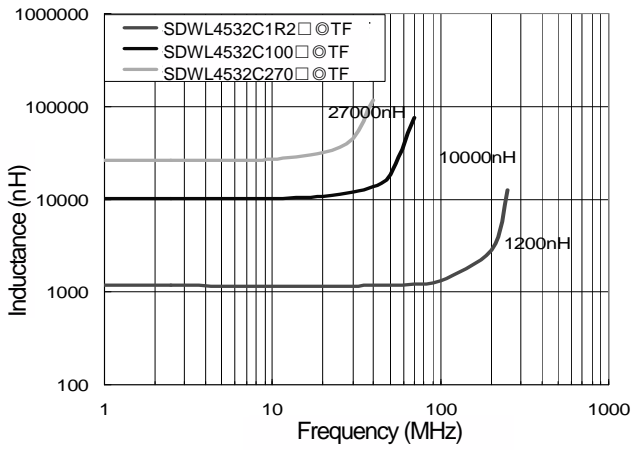
Q vs. Frequency Characteristics



# TYPICAL ELECTRICAL CHARACTERISTICS

## SDWL4532C TYPE

### Inductance vs. Frequency Characteristics



### Q vs. Frequency Characteristics

