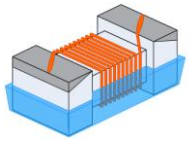
Wire Wound Chip Ceramic Inductor
-SDWL-CP/CH Series

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 SDWL-C series
- Inductance of SDWL-CH series is larger than SDWL-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

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

①

Type	
SDWL	Wire Wound Chip Inductor

②

External Dimensions
1005 [0402]
1608 [0603]
2012[0805]

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

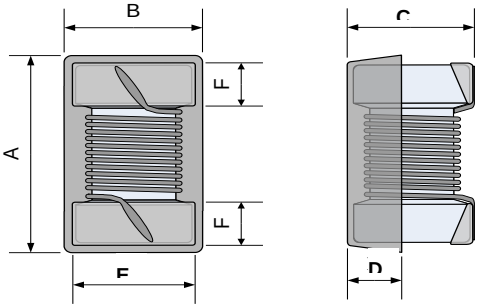
⑨

Hazardous Substance Free Products
F

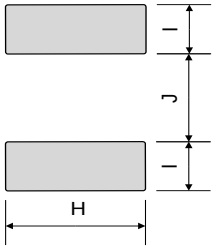
Sunlord Industrial Park, Dafuyuan Industrial Zone, Guanlan, Shenzhen, China 518110 **Tel**: 0086-755-29832660 **Fax**: 0086-755-82269029 **E-Mail**: sunlord@sunlordinc.com.

SHAPE AND DIMENSIONS

SDWL-CP/CH



Land Pattern



Unit: mm

Series	A	B	C	D Ref.	E	F	H Ref.	I Ref.	J Ref.
SDWL1005CP/CH	1.10±0.1	0.6±0.1	0.6±0.1	0.20	0.5±0.1	0.2±0.1	0.65	0.35	0.50
SDWL1608CP	1.70±0.2	1.1±0.2	0.9±0.2	0.38	0.76±0.1	0.3±0.1	1.02	0.64	0.64
SDWL2012CP	2.4 Max.	1.8 Max.	1.5 Max.	0.51	1.55±0.1	0.3±0.1	1.98	1.02	1.12

SPECIFICATIONS

SDWL1005CP 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
SDWL1005CP1N0□STF	1.0	C,S,D	20	250	0.030	2300	16.0
SDWL1005CP2N0□STF	2.0	B,C,S,D,J,K	24	250	0.038	2100	15.2
SDWL1005CP2N2□STF	2.2	C,S,D,J,K	25	250	0.038	2100	15.1
SDWL1005CP2N4□STF	2.4	S,D	23	250	0.042	2000	14.0
SDWL1005CP2N7□STF	2.7	C,S,D,J,K	24	250	0.056	1500	13.0
SDWL1005CP3N3□STF	3.3	B,C,S,D,J,K	28	250	0.045	1700	12.8
SDWL1005CP3N6□STF	3.6	C,S,D,J,K	28	250	0.045	1700	11.7
SDWL1005CP3N9□STF	3.9	C,S,D,J,K	28	250	0.045	1700	9.50
SDWL1005CP4N3□STF	4.3	B,S,D,J,K	27	250	0.050	1600	7.15
SDWL1005CP4N7□STF	4.7	S,D,J,K	23	250	0.075	1500	6.85
SDWL1005CP5N1□STF	5.1	B,S,D,J,K	20	250	0.100	1200	6.80
SDWL1005CP5N6□STF	5.6	B,S,D,J,K	29	250	0.048	1600	6.50
SDWL1005CP6N2□STF	6.2	B,S,D,J,K	29	250	0.050	1600	5.80
SDWL1005CP6N8□STF	6.8	G,H,J,K	28	250	0.070	1500	5.80
SDWL1005CP7N5□STF	7.5	G,H,J,K	26	250	0.080	1400	5.40
SDWL1005CP8N2□STF	8.2	G,H,J,K	28	250	0.065	1500	5.40
SDWL1005CP8N7□STF	8.7	G,H,J,K	29	250	0.070	1500	5.00
SDWL1005CP9N0□STF	9.0	G,H,J,K	27	250	0.080	1400	5.00
SDWL1005CP9N5□STF	9.5	G,H,J,K	28	250	0.075	1400	4.70
SDWL1005CP10N□STF	10	G,H,J,K	26	250	0.085	1300	4.70
SDWL1005CP11N□STF	11	G,H,J,K	29	250	0.070	1400	4.70
SDWL1005CP12N□STF	12	G,H,J,K	28	250	0.100	1200	4.40
SDWL1005CP13N□STF	13	G,H,J,K	27	250	0.140	870	4.20
SDWL1005CP15N□STF	15	G,H,J,K	28	250	0.115	1100	3.90
SDWL1005CP16N□STF	16	G,H,J,K	27	250	0.130	850	3.70
SDWL1005CP17N□STF	17	G,H,J,K	26	250	0.230	650	3.70
SDWL1005CP18N□STF	18	G,H,J,K	26	250	0.120	900	3.55
SDWL1005CP19N□STF	19	G,H,J,K	26	250	0.145	850	3.50
SDWL1005CP20N□STF	20	J,K	27	250	0.155	780	3.50
SDWL1005CP21N□STF	21	G,H,J,K	25	250	0.460	450	1.70
SDWL1005CP22N□STF	22	G,H,J,K	28	250	0.190	800	3.30

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SPECIFICATIONS

SDWL1005CP 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
SDWL1005CP23N□STF	23	G,H,J,K	28	250	0.160	800	3.30
SDWL1005CP24N□STF	24	G,H,J,K	27	250	0.275	700	3.15
SDWL1005CP25N□STF	25	G,H,J,K	26	250	0.260	700	3.15
SDWL1005CP26N□STF	26	G,H,J,K	27	250	0.275	700	3.15
SDWL1005CP27N□STF	27	G,H,J,K	27	250	0.330	450	3.20
SDWL1005CP30N□STF	30	G,H,J,K	25	250	0.350	450	2.90
SDWL1005CP33N□STF	33	G,H,J,K	28	250	0.330	490	2.80
SDWL1005CP36N□STF	36	G,H,J,K	26	250	0.360	480	2.80
SDWL1005CP37N□STF	37	G,H,J,K	26	250	0.480	470	2.70
SDWL1005CP39N□STF	39	G,H,J,K	28	250	0.430	450	2.60
SDWL1005CP40N□STF	40	G,H,J,K	28	250	0.520	450	2.60
SDWL1005CP43N□STF	43	G,H,J,K	26	250	0.520	450	2.50
SDWL1005CP47N□STF	47	G,H,J,K	28	250	0.580	420	2.40
SDWL1005CP51N□STF	51	G,H,J,K	26	250	0.700	360	2.30

SDWL1005CH 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
SDWL1005CH56N□STF	56	G,H,J,K	31	250	0.900	330	2.07
SDWL1005CH68N□STF	68	G,H,J,K	31	250	1.000	320	1.84
SDWL1005CH82N□STF	82	G,H,J,K	31	250	1.100	315	1.75
SDWL1005CHR10□STF	100	G,H,J,K	30	250	1.200	310	1.58
SDWL1005CHR12□STF	120	G,H,J,K	29	250	1.200	310	1.25
SDWL1005CHR15□STF	150	G,H,J,K	29	100/250	2.000	240	1.14
SDWL1005CHR16□STF	160	G,H,J,K	29	100/250	2.400	240	1.65
SDWL1005CHR18□STF	180	G,H,J,K	32	100/250	2.500	240	1.08
SDWL1005CHR22□STF	220	G,H,J,K	32	100/250	3.500	160	0.96

SDWL1608CP 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
SDWL1608CP1N8□STF	1.8	S,D,K	23	250/250	0.033	2100	16.0
SDWL1608CP2N2□STF	2.2	C,S,D,J,K	13	250/250	0.230	900	15.0
SDWL1608CP3N3□STF	3.3	C,S,D,J,K	32	250/250	0.030	1900	9.60
SDWL1608CP3N6□STF	3.6	C,S,D,J,K	40	250/250	0.031	1900	9.70
SDWL1608CP3N9□STF	3.9	C,S,D,J,K	35	250/250	0.039	1600	7.50
SDWL1608CP4N3□STF	4.3	C,S,D,J,K	30	250/250	0.080	1300	7.50
SDWL1608CP4N7□STF	4.7	D,K	26	250/250	0.100	1100	7.90
SDWL1608CP5N1□STF	5.1	C,S,D,J,K	40	250/250	0.036	1700	8.90
SDWL1608CP5N6□STF	5.6	B,C,S,D,J,K	48	250/250	0.040	1700	6.60

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SPECIFICATIONS

SDWL1608CP 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
SDWL1608CP6N0□STF	6.0	C,S,D,J,K	49	250/250	0.040	1700	6.00
SDWL1608CP6N8□STF	6.8	G,H,J,K	42	250/250	0.042	1400	5.80
SDWL1608CP7N2□STF	7.2	G,H,J,K	43	250/250	0.070	1400	5.40
SDWL1608CP7N5□STF	7.5	G,H,J,K	41	250/250	0.080	1300	5.30
SDWL1608CP8N2□STF	8.2	G,H,J,K	46	250/250	0.054	1400	5.90
SDWL1608CP8N7□STF	8.7	G,H,J,K	46	250/250	0.054	1400	5.50
SDWL1608CP9N1□STF	9.1	G,H,J,K	40	250/250	0.058	1400	5.10
SDWL1608CP9N5□STF	9.5	G,H,J,K	49	250/250	0.053	1400	4.90
SDWL1608CP10N□STF	10	G,H,J,K	49	250/250	0.048	1400	4.30
SDWL1608CP11N□STF	11	G,H,J,K	41	250/250	0.065	1400	4.10
SDWL1608CP12N□STF	12	G,H,J,K	37	250/250	0.115	1100	4.10
SDWL1608CP15N□STF	15	G,H,J,K	48	250/250	0.078	1200	3.60
SDWL1608CP16N□STF	16	G,H,J,K	48	250/250	0.085	1100	3.50
SDWL1608CP18N□STF	18	G,H,J,K	41	250/250	0.070	1200	3.30
SDWL1608CP19N□STF	19	G,H,J,K	32	250/250	0.110	1000	3.20
SDWL1608CP22N□STF	22	G,H,J,K	44	250/250	0.140	850	3.15
SDWL1608CP23N□STF	23	G,H,J,K	40	250/250	0.183	850	3.00
SDWL1608CP24N□STF	24	G,H,J,K	42	250/250	0.085	1100	2.95
SDWL1608CP27N□STF	27	G,H,J,K	44	250/250	0.200	780	2.80
SDWL1608CP30N□STF	30	G,H,J,K	49	250/250	0.160	920	2.80
SDWL1608CP33N□STF	33	G,H,J,K	45	250/250	0.220	680	2.70
SDWL1608CP36N□STF	36	G,H,J,K	44	250/250	0.225	720	2.50
SDWL1608CP39N□STF	39	G,H,J,K	44	250/250	0.250	680	2.45
SDWL1608CP43N□STF	43	G,H,J,K	45	250/250	0.225	810	2.45
SDWL1608CP47N□STF	47	G,H,J,K	47	200/250	0.240	680	2.30
SDWL1608CP51N□STF	51	G,H,J,K	45	200/250	0.280	660	2.30
SDWL1608CP56N□STF	56	G,H,J,K	45	200/250	0.300	610	2.20
SDWL1608CP68N□STF	68	G,H,J,K	46	200/250	0.350	600	2.00
SDWL1608CP72N□STF	72	G,H,J,K	46	150/250	0.420	550	1.90
SDWL1608CP75N□STF	75	G,H,J,K	46	150/250	0.520	500	1.90
SDWL1608CP82N□STF	82	G,H,J,K	45	150/250	0.460	510	1.80
SDWL1608CP91N□STF	91	G,H,J,K	45	150/250	0.580	440	1.65
SDWL1608CPR10□STF	100	G,H,J,K	49	150/250	0.540	470	1.70
SDWL1608CPR11□STF	110	G,H,J,K	47	150/250	0.580	440	1.60
SDWL1608CPR12□STF	120	G,H,J,K	47	150/250	0.720	420	1.55
SDWL1608CPR15□STF	150	J,K	47	150/250	0.820	390	1.35
SDWL1608CPR18□STF	180	G,H,J,K	48	100/250	1.500	310	1.30
SDWL1608CPR20□STF	200	G,H,J,K	47	100/250	2.000	280	1.25
SDWL1608CPR21□STF	210	G,H,J,K	48	100/250	2.000	280	1.20
SDWL1608CPR22□STF	220	G,H,J,K	47	100/250	2.000	280	1.10
SDWL1608CPR25□STF	250	G,H,J,K	45	100/250	3.000	240	1.05
SDWL1608CPR27□STF	270	G,H,J,K	46	100/250	2.250	260	1.05
SDWL1608CPR30□STF	300	G,H,J,K	47	100/250	2.800	220	0.99
SDWL1608CPR33□STF	330	G,H,J,K	46	100/250	3.600	180	0.93
SDWL1608CPR36□STF	360	G,H,J,K	47	100/250	4.600	170	0.93
SDWL1608CPR39□STF	390	G,H,J,K	47	100/250	4.770	170	0.88

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

SPECIFICATIONS

SDWL2012CP TYPE

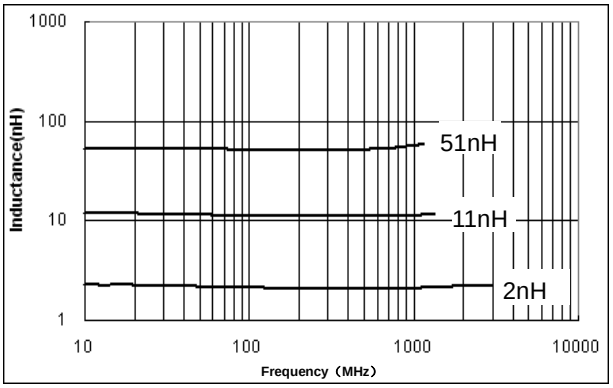
Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Max. DC Resistance	Max. Rated Current	Min. Self-resonant Frequency
Units	nH	-	-	MHz	Ω	mA	GHz
Symbol	L	-	Q	Freq.	DCR	Ir	S.R.F
SDWL2012CP2N6□STF	2.6	J	100	250/1500	0.015	2000	9500
SDWL2012CP6N2□STF	6.2	J	104	250/1000	0.027	1500	7200
SDWL2012CP6N8□STF	6.8	J	90	250/1000	0.066	1300	6000
SDWL2012CP11N□STF	11	G,J	93	250/500	0.039	1600	4750
SDWL2012CP12N□STF	12	G,J	91	250/500	0.039	1400	4425
SDWL2012CP13N□STF	13	G,J	91	250/500	0.039	1400	4100
SDWL2012CP18N□STF	18	G,J	95	250/500	0.050	1200	3650
SDWL2012CP33N□STF	33	G,J	100	250/500	0.087	1100	2410
SDWL2012CP47N□STF	47	G,J	105	200/500	0.093	1000	2170
SDWL2012CP56N□STF	56	G,J	100	200/500	0.122	950	1815
SDWL2012CP82N□STF	82	G,J	103	150/500	0.168	820	1525
SDWL2012CPR10□STF	100	G,J	100	150/500	0.220	720	1400
SDWL2012CPR12□STF	120	G,J	80	150/250	0.293	620	1265
SDWL2012CPR15□STF	150	G,J	80	100/250	0.288	600	1150
SDWL2012CPR18□STF	180	G,J	77	100/250	0.374	540	1025
SDWL2012CPR22□STF	220	G,J	75	100/250	0.426	500	930
SDWL2012CPR27□STF	270	G,J	75	100/250	0.754	420	830
SDWL2012CPR33□STF	330	G,J	54	100/100	1.004	360	770
SDWL2012CPR39□STF	390	G,J	52	100/100	1.110	330	700
SDWL2012CPR43□STF	430	G,J	46	100/100	1.488	300	680
SDWL2012CPR47□STF	470	G,J	52	50/100	1.559	280	640
SDWL2012CPR56□STF	560	G,J	46	25/100	2.067	240	550
SDWL2012CPR68□STF	680	G,J	46	25/100	2.355	210	535
SDWL2012CPR82□STF	820	G,J	50	25/100	3.945	180	485

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

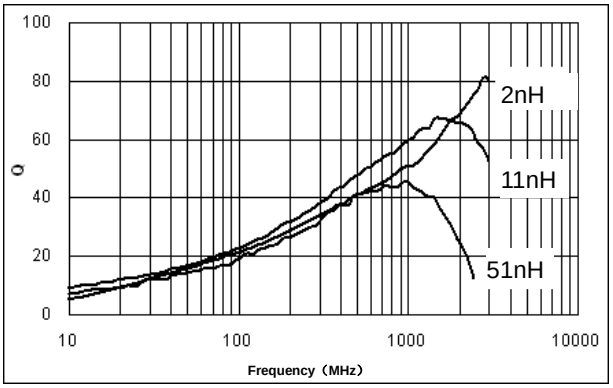
TYPICAL ELECTRICAL CHARACTERISTICS

SDWL1005CP TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

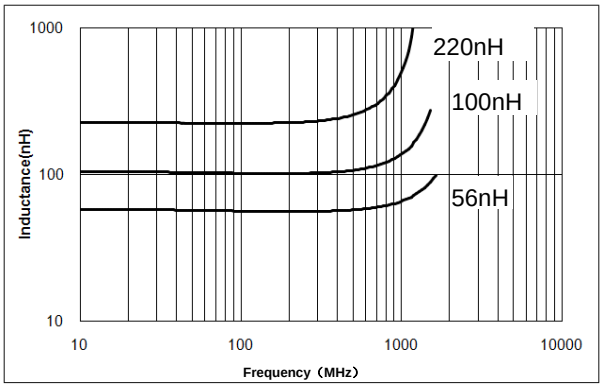


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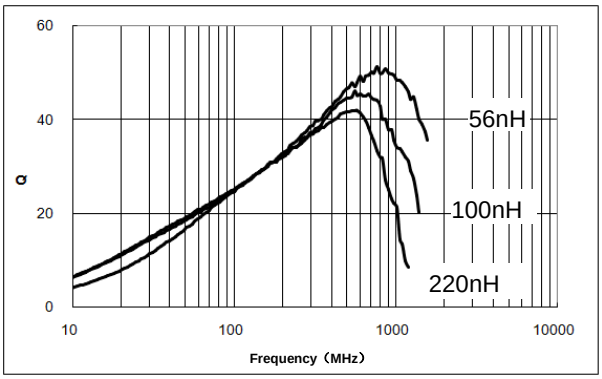
TYPICAL ELECTRICAL CHARACTERISTICS

SDWL1005CH TYPE

Inductance vs. Frequency Characteristics

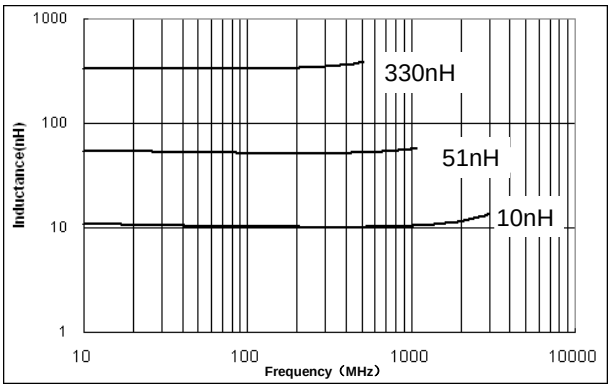


Q vs. Frequency Characteristics

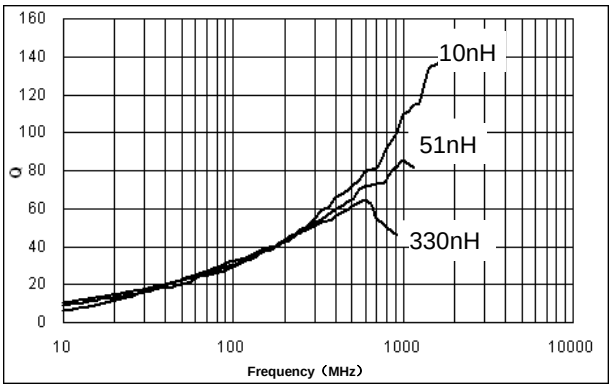


SDWL1608CP TYPE

Inductance vs. Frequency Characteristics

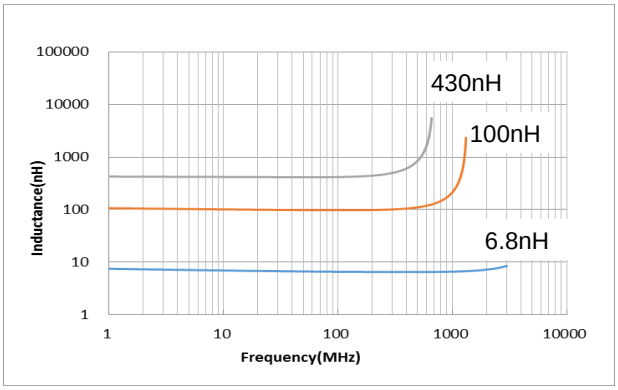


Q vs. Frequency Characteristics

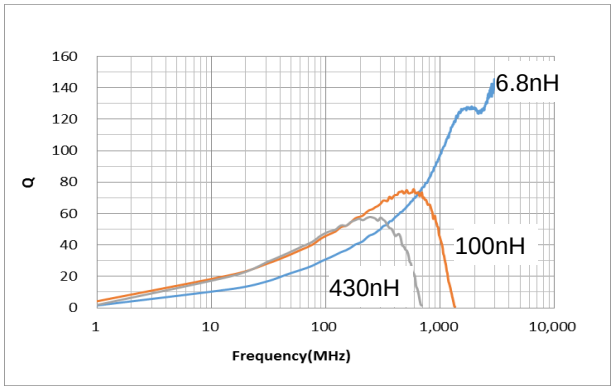


SDWL2012CP TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



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