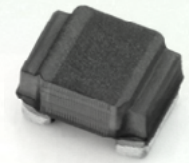


# Wire Wound Chip Ferrite Inductor - SDWL-FW Series

Operating Temp. : -40°C ~+85°C



## FEATURES

- Small chip suitable for surface mounting
- High inductance with ferrite material

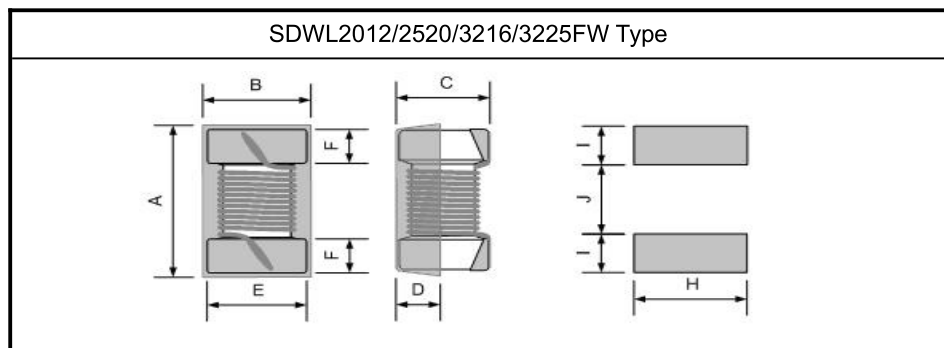
## APPLICATIONS

- Liquid crystal television and other electronic devices

## PRODUCT IDENTIFICATION

<u>SDWL</u> ①	<u>2012</u> ②	<u>FW</u> ③	<u>R27</u> ④	<u>J</u> ⑤	<u>S</u> ⑥	<u>T</u> ⑦	<u>F</u> ⑧																																																
① <table border="1"> <tr><th colspan="2">Type</th></tr> <tr><td>SDWL</td><td>Wire Wound Chip Inductor</td></tr> </table>	Type		SDWL	Wire Wound Chip Inductor	② <table border="1"> <tr><th colspan="2">External Dimensions</th></tr> <tr><td>2012</td><td>[0805]</td></tr> <tr><td>2520</td><td>[1008]</td></tr> <tr><td>3216</td><td>[1206]</td></tr> <tr><td>3225</td><td>[1210]</td></tr> </table>	External Dimensions		2012	[0805]	2520	[1008]	3216	[1206]	3225	[1210]	③ <table border="1"> <tr><th colspan="2">Material Code</th></tr> <tr><td>FW</td><td>Ferrite</td></tr> </table>	Material Code		FW	Ferrite	④ <table border="1"> <tr><th colspan="2">Nominal Inductance</th></tr> <tr><th>Example</th><th>Nominal Value</th></tr> <tr><td>R27</td><td>270nH</td></tr> <tr><td>2R7</td><td>2.7μH</td></tr> <tr><td>100</td><td>10μH</td></tr> </table>	Nominal Inductance		Example	Nominal Value	R27	270nH	2R7	2.7μH	100	10μH	⑤ <table border="1"> <tr><th colspan="2">Inductance Tolerance</th></tr> <tr><td>J</td><td>±5%</td></tr> <tr><td>K</td><td>±10%</td></tr> <tr><td>M</td><td>±20%</td></tr> </table>	Inductance Tolerance		J	±5%	K	±10%	M	±20%	⑥ <table border="1"> <tr><th colspan="2">Feature Type</th></tr> <tr><td>S</td><td>Sn Plating Five-faces Coating</td></tr> </table>	Feature Type		S	Sn Plating Five-faces Coating	⑦ <table border="1"> <tr><th colspan="2">Packing</th></tr> <tr><td>T</td><td>Tape &amp; Reel</td></tr> </table>	Packing		T	Tape & Reel	⑧ <table border="1"> <tr><th colspan="2">Hazardous Substance Free Products</th></tr> <tr><td colspan="2">F</td></tr> </table>	Hazardous Substance Free Products		F	
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## SHAPE AND DIMENSIONS



Unit: mm

Series	A Max.	B Max.	C Max.	D Ref.	E	F	H Ref.	I Ref.	J Ref.
SDWL2012FW	2.29	1.73	1.55	0.51	1.27±0.2	0.51±0.2	1.78	1.02	0.76
SDWL2520FW	2.92	2.79	2.29	0.51	2.10±0.2	0.50±0.2	2.54	1.02	1.27
SDWL3216FW	3.56	2.16	1.52	0.51	1.60±0.2	0.50±0.2	1.93	1.02	1.78
SDWL3225FW	3.65	2.95	2.70	0.51	2.40±0.2	0.50±0.2	3.02	1.02	1.78

## SPECIFICATIONS

### SDWL2012FW TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	μH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	I <sub>r</sub>
SDWL2012FWR27 □ STF	0.27	J,K,M	15	25	550	0.91	350
SDWL2012FWR47 □ STF	0.47	J,K,M	8	100	500	0.72	300
SDWL2012FWR56 □ STF	0.56	J,K,M	15	25	360	0.60	145
SDWL2012FW1R0 □ STF	1.0	J,K,M	15	7.9	63	1.20	245
SDWL2012FW1R5 □ STF	1.5	J,K,M	15	7.9	60	1.45	225
SDWL2012FW1R8 □ STF	1.8	J,K,M	15	7.9	60	1.45	200
SDWL2012FW2R2 □ STF	2.2	J,K,M	10	7.9/50	200	2.50	100
SDWL2012FW3R3 □ STF	3.3	J,K,M	15	7.9	50	2.30	175
SDWL2012FW3R9 □ STF	3.9	J,K,M	10	7.9	50	2.50	80
SDWL2012FW4R7 □ STF	4.7	J,K,M	15	7.9	43	2.80	140
SDWL2012FW6R8 □ STF	6.8	J,K,M	15	7.9	36	3.40	115
SDWL2012FW8R2 □ STF	8.2	J,K,M	10	7.9/2.5	35	4.50	100
SDWL2012FW100 □ STF	10	J,K,M	10	2.5	30	4.70	98
SDWL2012FW150 □ STF	15	J,K,M	10	2.5	23	6.50	80
SDWL2012FW220 □ STF	22	J,K,M	10	2.5	20	8.00	68
SDWL2012FW330 □ STF	33	J,K,M	10	2.5	17	10.70	60
SDWL2012FW470 □ STF	47	J,K,M	10	2.5	14	13.80	55
SDWL2012FW680 □ STF	68	J,K,M	8	2.5	11	17.50	40

### SDWL2520FW TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	μH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	I <sub>r</sub>
SDWL2520FWR33 □ STF	0.33	J,K,M	50	25/100	600	0.17	700
SDWL2520FW1R0 □ STF	1.0	J,K,M	20	7.9/50	250	0.8	600
SDWL2520FW1R2 □ STF	1.2	J,K,M	37	7.9/50	250	0.8	650
SDWL2520FW1R5 □ STF	1.5	J,K,M	35	7.9/50	190	0.76	630
SDWL2520FW1R8 □ STF	1.8	J,K,M	33	7.9/50	170	0.84	600
SDWL2520FW2R2 □ STF	2.2	J,K,M	30	7.9/50	150	1.15	520
SDWL2520FW2R7 □ STF	2.7	J,K,M	25	7.9/50	120	1.30	490
SDWL2520FW3R3 □ STF	3.3	J,K,M	23	7.9/50	100	1.70	450
SDWL2520FW3R9 □ STF	3.9	J,K,M	26	7.9/25	100	2.00	420
SDWL2520FW4R7 □ STF	4.7	J,K,M	31	7.9	60	1.68	400
SDWL2520FW5R6 □ STF	5.6	J,K,M	23	7.9	80	2.65	380
SDWL2520FW6R8 □ STF	6.8	J,K,M	20	7.9	60	3.00	360
SDWL2520FW8R2 □ STF	8.2	J,K,M	20	7.9	40	3.30	330
SDWL2520FW100 □ STF	10	J,K,M	15	7.9	40	2.95	300

## SPECIFICATIONS

### SDWL3216FW TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	μH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	I <sub>r</sub>
SDWL3216FW1R5 □ STF	1.5	J,K,M	25	7.9	260	1.20	320
SDWL3216FW1R8 □ STF	1.8	J,K,M	25	7.9	250	1.20	320
SDWL3216FW2R2 □ STF	2.2	J,K,M	25	7.9	240	1.30	300
SDWL3216FW2R7 □ STF	2.7	J,K,M	25	7.9	230	1.40	300
SDWL3216FW3R3 □ STF	3.3	J,K,M	25	7.9	200	1.50	280
SDWL3216FW3R9 □ STF	3.9	J,K,M	25	7.9	190	1.90	280
SDWL3216FW4R7 □ STF	4.7	J,K,M	25	7.9	170	2.20	280
SDWL3216FW5R6 □ STF	5.6	J,K,M	25	7.9	160	2.40	260
SDWL3216FW6R8 □ STF	6.8	J,K,M	25	7.9	150	2.80	240
SDWL3216FW8R2 □ STF	8.2	J,K,M	25	7.9	130	3.10	220
SDWL3216FW100 □ STF	10.0	J,K,M	25	7.9	120	4.00	200
SDWL3216FW120 □ STF	12.0	J,K,M	18	2.5	110	4.60	200
SDWL3216FW150 □ STF	15.0	J,K,M	16	2.5	90	8.20	160
SDWL3216FW180 □ STF	18.0	J,K,M	16	2.5	80	9.00	130

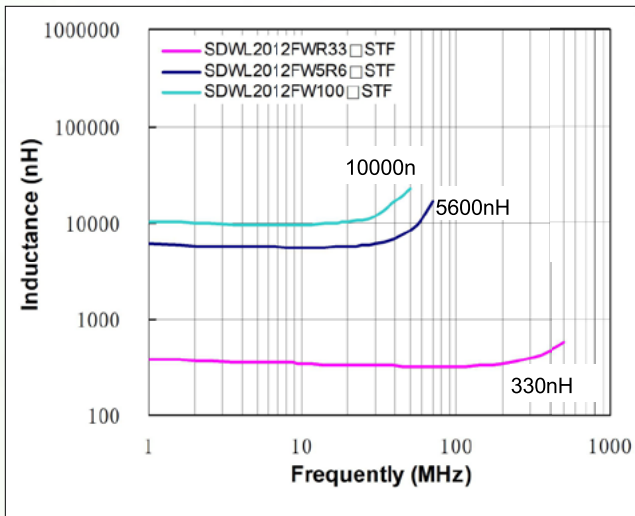
### SDWL3225FW TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min. Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	μH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	I <sub>r</sub>
SDWL3225FWR12 □ STF	0.12	J,K,M	30	25	500	0.22	450
SDWL3225FWR15 □ STF	0.15	J,K,M	30	25	450	0.40	450
SDWL3225FWR18 □ STF	0.18	J,K,M	30	25	400	0.28	450
SDWL3225FWR22 □ STF	0.22	J,K,M	30	25	350	0.32	450
SDWL3225FWR27 □ STF	0.27	J,K,M	30	25	320	0.36	450
SDWL3225FWR33 □ STF	0.33	J,K,M	30	25	300	0.40	450
SDWL3225FWR39 □ STF	0.39	J,K,M	30	25	250	0.45	450
SDWL3225FWR47 □ STF	0.47	J,K,M	30	25	220	0.50	450
SDWL3225FWR56 □ STF	0.56	J,K,M	30	25	180	0.55	450
SDWL3225FWR68 □ STF	0.68	J,K,M	30	25	160	0.60	450
SDWL3225FWR82 □ STF	0.82	J,K,M	30	25	140	0.65	450
SDWL3225FW1R0 □ STF	1.0	J,K,M	30	7.9	120	0.70	400
SDWL3225FW1R2 □ STF	1.2	J,K,M	30	7.9	100	0.75	390
SDWL3225FW1R5 □ STF	1.5	J,K,M	30	7.9	85	0.85	370
SDWL3225FW1R8 □ STF	1.8	J,K,M	30	7.9	80	0.90	350
SDWL3225FW2R2 □ STF	2.2	J,K,M	30	7.9	75	1.00	320
SDWL3225FW2R7 □ STF	2.7	J,K,M	30	7.9	70	1.10	290
SDWL3225FW3R3 □ STF	3.3	J,K,M	30	7.9	60	1.20	260
SDWL3225FW3R9 □ STF	3.9	J,K,M	30	7.9	55	1.30	250
SDWL3225FW4R7 □ STF	4.7	J,K,M	30	7.9	50	1.50	224
SDWL3225FW5R6 □ STF	5.6	J,K,M	30	7.9	45	1.60	204
SDWL3225FW6R8 □ STF	6.8	J,K,M	30	7.9	40	1.80	180
SDWL3225FW8R2 □ STF	8.2	J,K,M	30	7.9	35	2.00	170
SDWL3225FW100 □ STF	10	J,K,M	25	7.9	30	2.10	150
SDWL3225FW120 □ STF	12	J,K,M	25	7.9	20	2.50	140

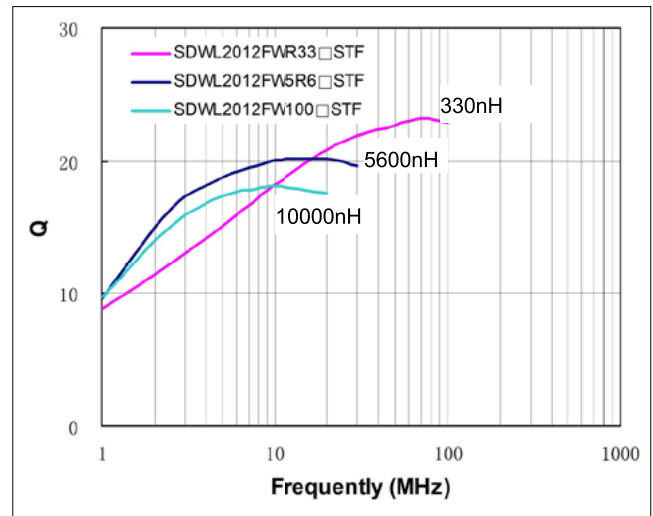
## TYPICAL ELECTRICAL CHARACTERISTICS

### SDWL2012FW TYPE

Inductance vs. Frequency Characteristics

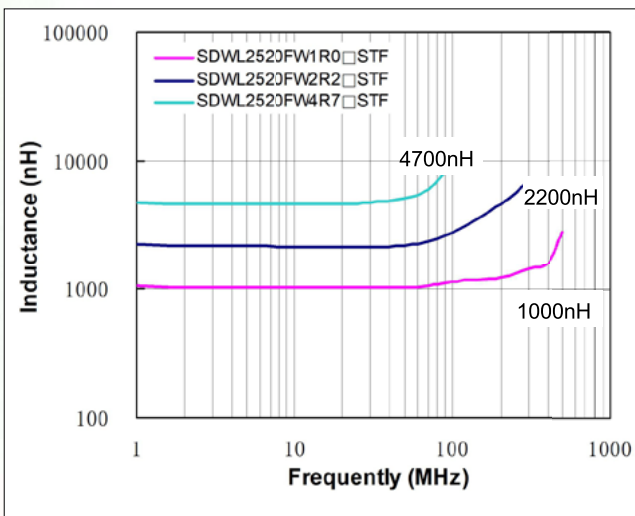


Q vs. Frequency Characteristics

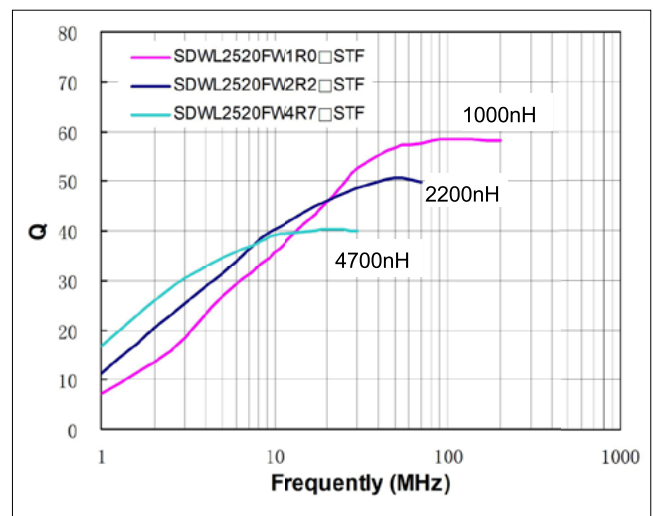


### SDWL2520FW TYPE

Inductance vs. Frequency Characteristics

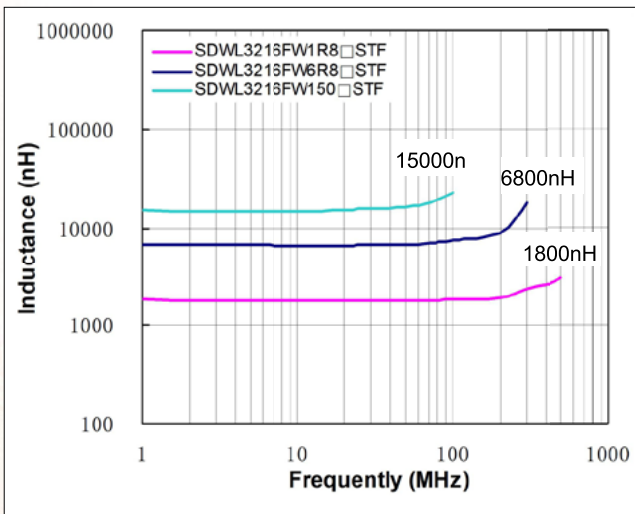


Q vs. Frequency Characteristics

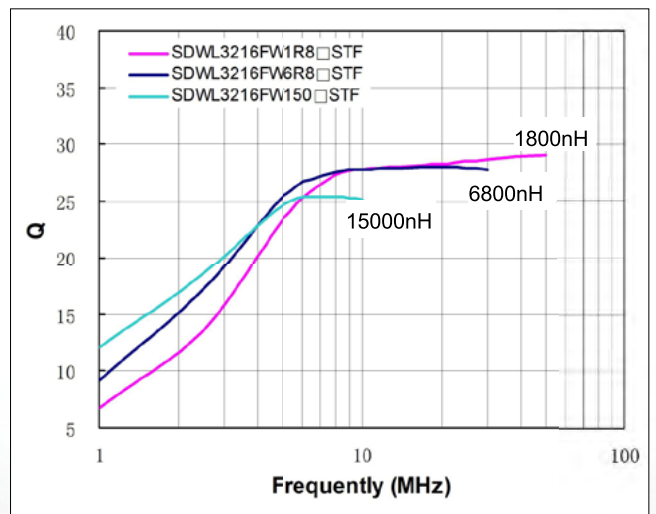


### SDWL3216FW TYPE

Inductance vs. Frequency Characteristics



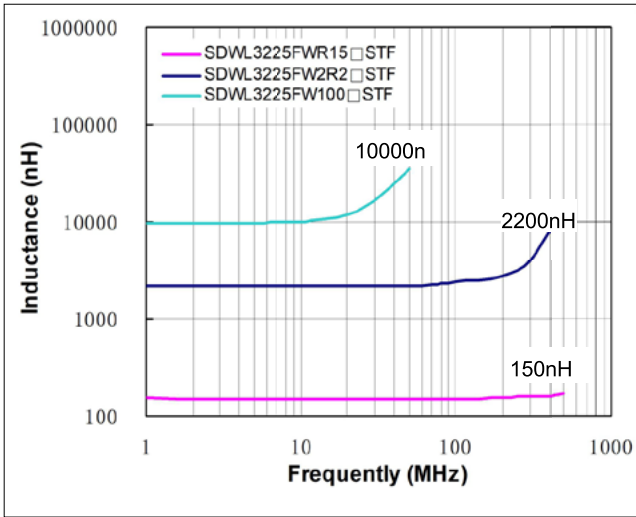
Q vs. Frequency Characteristics



## TYPICAL ELECTRICAL CHARACTERISTICS

### SDWL3225FW TYPE

#### Inductance vs. Frequency Characteristics



#### Q vs. Frequency Characteristics

