



### Wire Wound Chip Ferrite Inductor (SDWL-F Series)

#### • Dimension

**SDWL-F**

Type	A	B	C	D
SDWL2520 [1008]	2.5±0.2 [.098±.008]	2.0±0.2 [.079±.008]	1.8±0.2 [.071±.008]	1.4±0.1 [.055±.004]
SDWL3225 [1210]	3.2±0.2 [.126±.008]	2.5±0.2 [.098±.008]	2.2±0.2 [.087±.008]	1.4±0.1 [.055±.004]
SDWL4532 [1812]	4.5±0. [.178±.012]	3.2±0.2 [.126±.008]	3.2±0.2 [.126±.008]	1.2±0.3 [.049±.012]

Unit: mm [inch]

#### • Features

- High inductance with ferrite material
- Small chip suitable for surface mounting
- Tight inductance tolerance and stable inductance at high frequency
- Coils are encapsulated in heat-proof resin providing resistance to mechanical shock and pressure
- Operating temperature:  
SDWL-C Series: -40°C to +105°C

#### • Applications

- Audiovisual equipment
- Computer equipment i.e. hard disk
- Compact-sized electronic equipment

#### • Part Number Identification

**SDWL**    **2520**    **F**    **1R0**    **J**    **I**    **F**  
 (1)            (2)            (3)            (4)            (5)            (6)            (7)

(1)

Product ID	
SDWL-F	Wire wound chip ferrite inductor

(2)

Dimensions	
2520	[1008]
3225	[1210]
4532	[1812]

(3)

Material
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(4)

Nominal Inductance	
Example	
R12	120nH
1R0	1.0µH
101	100µH

(5)

Tolerance of Inductance	
J	±5%
K	±10%
M	±20%

(6)

Packing Type	
B	Bulk packing
T	Tape & reel packing

(7)

Hazardous Substance Free Products
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### ● SDWL2520F Series

Part Number	Inductance	Quality Factor (min.)	Test Frequency	DC Resistance (max.)	Rated Current (max.)	Self-resonant Frequency (min.)
Unit	μH	-	MHz	Ω	mA	MHz
Symbol	L	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL2520F10NJ	0.01±5%	15	100	0.26	530	2150
SDWL2520F12NJ	0.012±5%	15	100	0.27	400	2050
SDWL2520F15NJ	0.015±5%	15	100	0.29	480	2000
SDWL2520F18NJ	0.018±5%	15	100	0.31	450	1850
SDWL2520F22NJ	0.022±5%	15	100	0.37	420	1650
SDWL2520F27NJ	0.027±5%	15	100	0.4	410	1550
SDWL2520F33NJ	0.033±5%	20	100	0.42	400	1450
SDWL2520F39NJ	0.039±5%	20	100	0.45	380	1350
SDWL2520F47NJ	0.047±5%	20	100	0.5	360	1200
SDWL2520F56NJ	0.056±5%	20	100	0.6	340	1100
SDWL2520F68NJ	0.068±5%	20	100	0.65	320	1050
SDWL2520F82NJ	0.082±5%	20	100	0.75	300	900
SDWL2520FR10J	0.10±5%	30	100	0.8	280	800
SDWL2520FR12J	0.12±5%	30	25.2	0.3	550	700
SDWL2520FR15J	0.15±5%	30	25.2	0.35	500	550
SDWL2520FR18J	0.18±5%	30	25.2	0.4	460	500
SDWL2520FR22J	0.22±5%	30	25.2	0.5	430	450
SDWL2520FR27J	0.27±5%	30	25.2	0.55	420	425
SDWL2520FR33J	0.33±5%	30	25.2	0.6	400	400
SDWL2520FR39J	0.39±5%	30	25.2	0.65	375	375
SDWL2520FR47J	0.47±5%	30	25.2	0.68	350	350
SDWL2520FR56J	0.56±5%	30	25.2	0.75	325	325
SDWL2520FR68J	0.68±5%	30	25.2	0.85	300	300
SDWL2520FR82J	0.82±5%	30	25.2	1	260	260
SDWL2520F1R0J	1.0±5%	30	7.96	1.1	245	245
SDWL2520F1R2J	1.2±5%	30	7.96	1.2	230	230
SDWL2520F1R5J	1.5±5%	30	7.96	1.3	220	182
SDWL2520F1R8J	1.8±5%	30	7.96	1.45	210	135
SDWL2520F2R2J	2.2±5%	30	7.96	1.55	200	105
SDWL2520F2R7J	2.7±5%	30	7.96	1.7	195	70
SDWL2520F3R3J	3.3±5%	30	7.96	1.9	185	55
SDWL2520F3R9J	3.9±5%	30	7.96	2.1	180	48
SDWL2520F4R7J	4.7±5%	30	7.96	2.3	175	43
SDWL2520F5R6J	5.6±5%	25	7.96	2.5	170	42
SDWL2520F6R8J	6.8±5%	25	7.96	2.7	165	39
SDWL2520F8R2J	8.2±5%	25	7.96	3.05	160	36
SDWL2520F100J	10±5%	25	2.52	3.5	155	33
SDWL2520F120J	12±5%	25	2.52	3.8	150	30
SDWL2520F150J	15±5%	25	2.52	4.4	140	26
SDWL2520F180J	18±5%	25	2.52	4.8	130	24
SDWL2520F220J	22±5%	25	2.52	5.5	125	22
SDWL2520F270J	27±5%	25	2.52	6.3	115	21
SDWL2520F330J	33±5%	25	2.52	7.1	110	20
SDWL2520F390J	39±5%	20	2.52	9.5	90	18
SDWL2520F470J	47±5%	20	2.52	11.1	80	17
SDWL2520F560J	56±5%	20	2.52	12.1	75	16
SDWL2520F680J	68±5%	20	2.52	16.6	70	15
SDWL2520F820J	82±5%	20	2.52	19.0	66	13
SDWL2520F101J	100±5%	15	0.796	21.0	60	12



### ● SDWL3225F Series

Part Number	Inductance	Quality Factor (min.)	Test Frequency	DC Resistance (max.)	Rated Current (max.)	Self-resonant Frequency (min.)
Unit	μH	-	MHz	Ω	mA	MHz
Symbol	L	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL3225F10NJ	0.01±5%	15	100	0.13	450	2500
SDWL3225F12NJ	0.012±5%	17	100	0.14	450	2300
SDWL3225F15NJ	0.015±5%	19	100	0.16	450	2100
SDWL3225F18NJ	0.018±5%	21	100	0.18	450	1900
SDWL3225F22NJ	0.022±5%	23	100	0.2	450	1700
SDWL3225F27NJ	0.027±5%	23	100	0.22	450	1500
SDWL3225F33NJ	0.033±5%	25	100	0.24	450	1400
SDWL3225F39NJ	0.039±5%	25	100	0.27	450	1300
SDWL3225F47NJ	0.047±5%	26	100	0.30	450	1200
SDWL3225F56NJ	0.056±5%	26	100	0.33	450	1100
SDWL3225F68NJ	0.068±5%	27	100	0.36	450	1000
SDWL3225F82NJ	0.082±5%	27	100	0.40	450	900
SDWL3225FR10J	0.10±5%	28	100	0.44	450	700
SDWL3225FR12J	0.12±5%	30	25.2	0.22	450	500
SDWL3225FR15J	0.15±5%	30	25.2	0.25	450	450
SDWL3225FR18J	0.18±5%	30	25.2	0.28	450	400
SDWL3225FR22J	0.22±5%	30	25.2	0.32	450	350
SDWL3225FR27J	0.27±5%	30	25.2	0.36	450	320
SDWL3225FR33J	0.33±5%	30	25.2	0.40	450	300
SDWL3225FR39J	0.39±5%	30	25.2	0.45	450	250
SDWL3225FR47J	0.47±5%	30	25.2	0.50	450	220
SDWL3225FR56J	0.56±5%	30	25.2	0.55	450	180
SDWL3225FR68J	0.68±5%	30	25.2	0.60	450	160
SDWL3225FR82J	0.82±5%	30	25.2	0.65	450	140
SDWL3225F1R0J	1.0±5%	30	7.960	0.70	400	120
SDWL3225F1R2J	1.2±5%	30	7.960	0.75	390	100
SDWL3225F1R5J	1.5±5%	30	7.960	0.85	370	85
SDWL3225F1R8J	1.8±5%	30	7.960	0.90	350	80
SDWL3225F2R2J	2.2±5%	30	7.960	1.00	320	75
SDWL3225F2R7J	2.7±5%	30	7.960	1.10	290	70
SDWL3225F3R3J	3.3±5%	30	7.960	1.20	260	60
SDWL3225F3R9J	3.9±5%	30	7.960	1.30	250	55
SDWL3225F4R7J	4.7±5%	30	7.960	1.50	220	50
SDWL3225F5R6J	5.6±5%	30	7.960	1.60	200	45
SDWL3225F6R8J	6.8±5%	30	7.960	1.80	180	40
SDWL3225F8R2J	8.2±5%	30	7.960	2.00	170	35
SDWL3225F100J	10±5%	30	2.520	2.10	150	30
SDWL3225F120J	12±5%	30	2.520	2.50	140	20
SDWL3225F150J	15±5%	30	2.520	2.80	130	20
SDWL3225F180J	18±5%	30	2.520	3.30	120	20
SDWL3225F220J	22±5%	30	2.520	3.70	110	20
SDWL3225F270J	27±5%	30	2.520	5.00	80	20
SDWL3225F330J	33±5%	30	2.520	5.60	70	17
SDWL3225F390J	39±5%	30	2.520	6.40	65	16
SDWL3225F470J	47±5%	30	2.520	7.00	60	15
SDWL3225F560J	56±5%	30	2.520	8.00	55	13
SDWL3225F680J	68±5%	30	2.520	9.00	50	12
SDWL3225F820J	82±5%	20	2.520	10.00	45	11



### ● SDWL3225FW Series (continued from the preceding page)

Part Number	Inductance	Quality Factor (min.)	Test Frequency	DC Resistance (max.)	Rated Current (max.)	Self-resonant Frequency (min.)
Unit	μH	-	MHz	Ω	mA	MHz
Symbol	L	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL3225F101J	100±5%	20	0.796	10.00	40	10
SDWL3225F121J	120±5%	20	0.796	11.00	70	10
SDWL3225F151J	150±5%	20	0.796	15.00	65	8
SDWL3225F181J	180±5%	20	0.796	17.00	60	7
SDWL3225F221J	220±5%	20	0.796	21.00	50	7
SDWL3225F271J	270±5%	20	0.796	28	45	6
SDWL3225F331J	330±5%	20	0.796	34	40	5
SDWL3225F391J	390±5%	20	0.796	36	35	5
SDWL3225F471J	470±5%	20	0.796	40	25	4

### ● SDWL4532F Series

Part Number	Inductance	Quality Factor (min.)	Test Frequency	DC Resistance (max.)	Rated Current (max.)	Self-resonant Frequency (min.)
Unit	μH	-	MHz	Ω	mA	MHz
Symbol	L	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL4532FR10M	0.10±20%	35	25.20	0.18	800	300
SDWL4532FR12M	0.12±20%	35	25.20	0.20	770	280
SDWL4532FR15M	0.15±20%	35	25.20	0.22	730	250
SDWL4532FR18M	0.18±20%	35	25.20	0.24	700	220
SDWL4532FR22M	0.22±20%	40	25.20	0.25	665	200
SDWL4532FR27M	0.27±20%	40	25.20	0.26	635	180
SDWL4532FR33M	0.33±20%	40	25.20	0.28	605	165
SDWL4532FR39M	0.39±20%	40	25.20	0.30	575	150
SDWL4532FR47M	0.47±20%	40	25.20	0.32	545	145
SDWL4532FR56M	0.56±20%	40	25.20	0.36	520	140
SDWL4532FR68M	0.68±20%	40	25.20	0.40	500	135
SDWL4532FR82M	0.82±20%	40	25.20	0.45	475	130
SDWL4532F1R0K	1.0±10%	50	7.960	0.50	450	100
SDWL4532F1R2K	1.2±10%	50	7.960	0.55	430	80
SDWL4532F1R5K	1.5±10%	50	7.960	0.60	410	70
SDWL4532F1R8K	1.8±10%	50	7.960	0.65	390	65
SDWL4532F2R2K	2.2±10%	50	7.960	0.70	380	55
SDWL4532F2R7K	2.7±10%	50	7.960	0.75	370	50
SDWL4532F3R3K	3.3±10%	50	7.960	0.80	355	45
SDWL4532F3R9K	3.9±10%	50	7.960	0.90	330	40
SDWL4532F4R7K	4.7±10%	50	7.960	1.00	315	35
SDWL4532F5R6K	5.6±10%	50	7.960	1.10	300	33
SDWL4532F6R8K	6.8±10%	50	7.960	1.20	285	27
SDWL4532F8R2K	8.2±10%	50	7.960	1.40	270	25
SDWL4532F100K	10±10%	50	2.520	1.60	250	20
SDWL4532F120K	12±10%	50	2.520	2.00	225	18
SDWL4532F150K	15±10%	50	2.520	2.50	200	17
SDWL4532F180K	18±10%	50	2.520	2.80	190	15
SDWL4532F220K	22±10%	50	2.520	3.20	180	13
SDWL4532F270K	27±10%	50	2.520	3.60	170	12
SDWL4532F330K	33±10%	50	2.520	4.00	160	11
SDWL4532F390K	39±10%	50	2.520	4.50	150	10
SDWL4532F470K	47±10%	50	2.520	5.00	140	10
SDWL4532F560K	56±10%	50	2.520	5.50	135	9.0



● **SDWL4532F Series** (continued from the preceding page)

Part Number	Inductance	Quality Factor (min.)	Test Frequency	DC Resistance (max.)	Rated Current (max.)	Self-resonant Frequency (min.)
Unit	μH	-	MHz	Ω	mA	MHz
Symbol	L	Q	Freq.	DCR	I <sub>r</sub>	S.R.F
SDWL4532F680K	68±10%	50	2.520	6.00	130	9.0
SDWL4532F820K	82±10%	50	2.520	7.00	120	8.0
SDWL4532F101K	100±10%	40	0.796	8.00	110	8.0
SDWL4532F121K	120±10%	40	0.796	8.00	110	6.0
SDWL4532F151K	150±10%	40	0.796	9.00	105	5.0
SDWL4532F181K	180±10%	40	0.796	9.50	102	5.0
SDWL4532F221K	220±10%	40	0.796	10.00	100	4.0
SDWL4532F271K	270±10%	40	0.796	12.00	92	4.0
SDWL4532F331K	330±10%	40	0.796	14.00	85	3.5
SDWL4532F391K	390±10%	40	0.796	18.00	80	3.0
SDWL4532F471K	470±10%	40	0.796	26.00	62	3.0
SDWL4532F561K	560±10%	30	0.796	30.00	50	3.0
SDWL4532F681K	680±10%	30	0.796	30.00	50	3.0
SDWL4532F821K	820±10%	30	0.796	35.00	30	2.5
SDWL4532F102K	1000±10%	20	0.252	40.00	30	2.5