

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

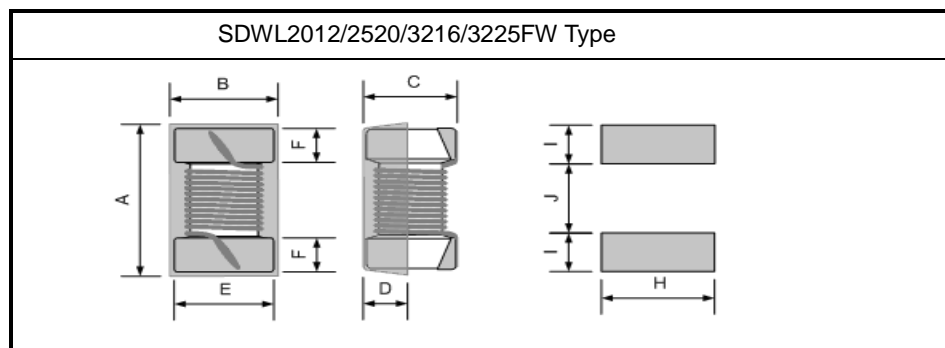
APPLICATIONS

- 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 Type SDWL Wire Wound Chip Inductor | ② External Dimensions 2012 [0805] 2520 [1008] 3216 [1206] 3225 [1210] | ③ Material Code FW Ferrite | ④ Nominal Inductance Example Nominal Value R27 270nH 2R7 2.7μH 270 27μH | ⑤ Inductance Tolerance J ±5% K ±10% M ±20% | ⑥ Feature Type S Sn Plating Five-faces Coating | ⑦ Packing T Tape & Reel | ⑧ Hazardous Substance Free Products F |

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 |

Sunlord

Specifications subject to change without notice. Please check our website for latest information. Revised 2021/05/15

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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 _r |
| 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 _r |
| 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 _r |
| 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

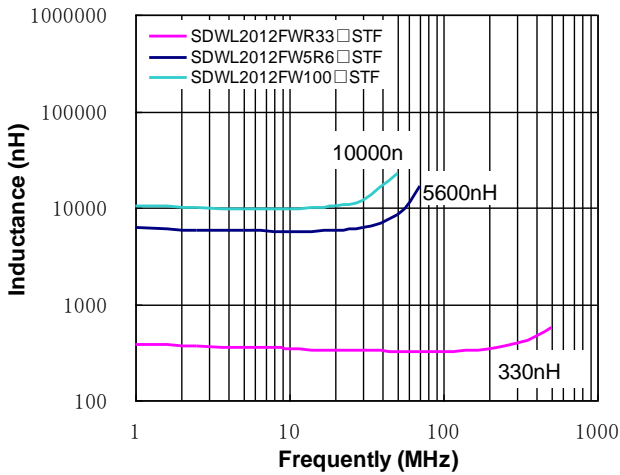
| Part Number | Inductance | Tolerance | Min. Quality Factor | L/Q Test Freq. | Min. Self-resonant Frequency | Max. DC Resistance | Max. Rated Current |
|-------------------|------------|-----------|---------------------|----------------|------------------------------|--------------------|--------------------|
| Units | μH | - | - | MHz | MHz | Ω | mA |
| Symbol | L | - | Q | Freq. | S.R.F | DCR | I _r |
| 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 | 1.0 | 320 |
| SDWL3225FW2R7□STF | 2.7 | J, K, M | 30 | 7.9 | 70 | 1.1 | 290 |
| SDWL3225FW3R3□STF | 3.3 | J, K, M | 30 | 7.9 | 60 | 1.2 | 260 |
| SDWL3225FW3R9□STF | 3.9 | J, K, M | 30 | 7.9 | 55 | 1.3 | 250 |
| SDWL3225FW4R7□STF | 4.7 | J, K, M | 30 | 7.9 | 50 | 1.5 | 224 |
| SDWL3225FW5R6□STF | 5.6 | J, K, M | 30 | 7.9 | 45 | 1.6 | 204 |
| SDWL3225FW6R8□STF | 6.8 | J, K, M | 30 | 7.9 | 40 | 1.8 | 180 |
| SDWL3225FW8R2□STF | 8.2 | J, K, M | 30 | 7.9 | 35 | 2.0 | 170 |
| SDWL3225FW100□STF | 10 | J, K, M | 25 | 7.9 | 30 | 2.1 | 150 |
| SDWL3225FW120□STF | 12 | J, K, M | 25 | 7.9 | 20 | 2.5 | 140 |

※□: Please specify the inductance tolerance code (J=±5%, K=±10%, M=±20%).

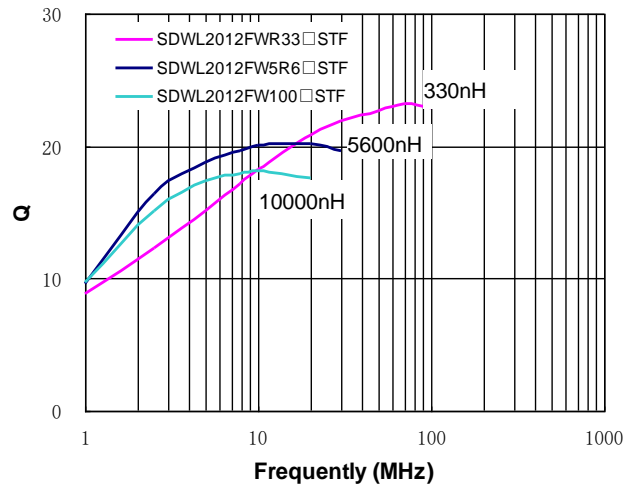
TYPICAL ELECTRICAL CHARACTERISTICS

SDWL2012FW TYPE

Inductance vs. Frequency Characteristics

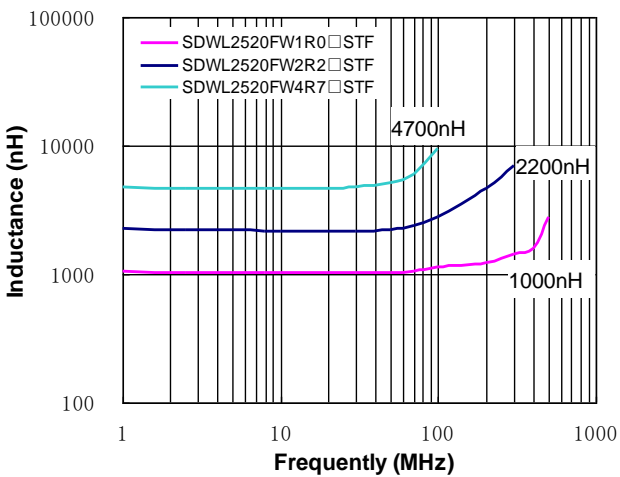


Q vs. Frequency Characteristics

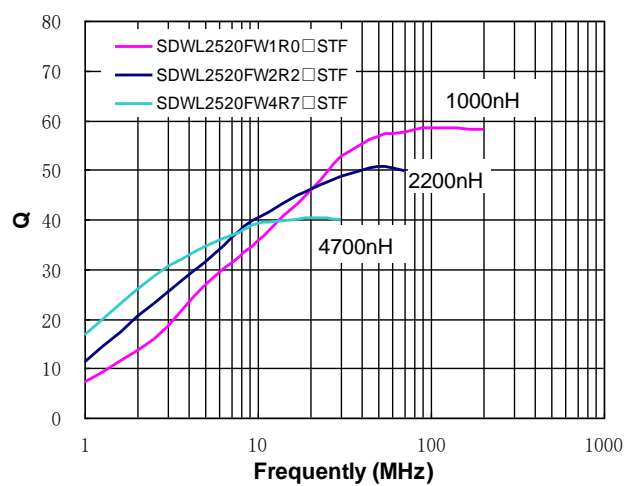


SDWL2520FW TYPE

Inductance vs. Frequency Characteristics

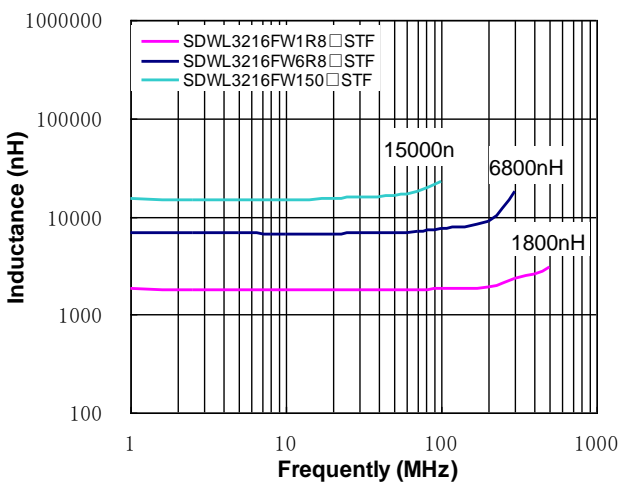


Q vs. Frequency Characteristics

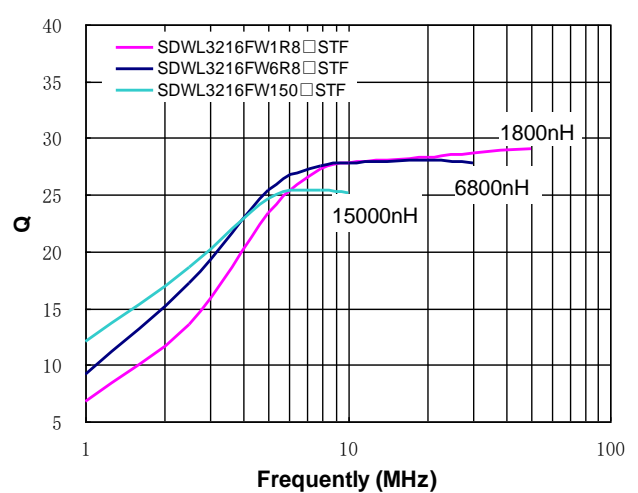


SDWL3216FW TYPE

Inductance vs. Frequency Characteristics



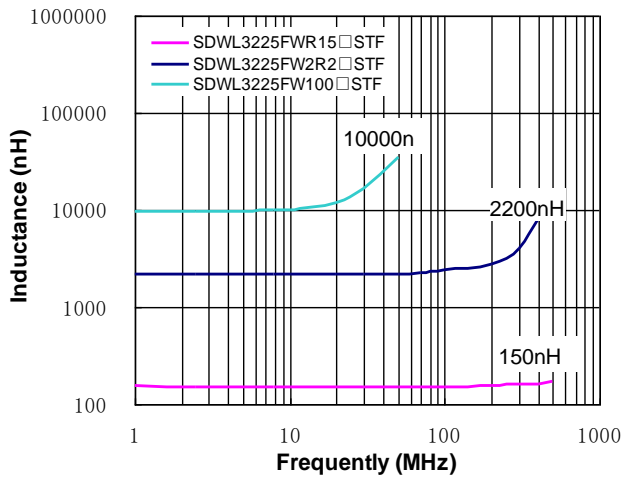
Q vs. Frequency Characteristics



TYPICAL ELECTRICAL CHARACTERISTICS

SDWL3225FW TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

