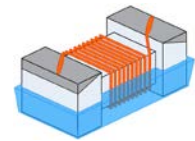


Wire Wound Chip Ceramic Inductor - SDWL-C-M Series

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 high reliability

APPLICATIONS

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

PRODUCT IDENTIFICATION

SDWL **1608** **C** **10N** **J** **S** **T** **F** **M01**
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

①

| Type | |
|------|--------------------------|
| SDWL | Wire Wound Chip Inductor |

②

| External Dimensions |
|---------------------|
| 1608 [0603] |

③

| Material Code | |
|---------------|---------|
| C | Ceramic |

④

| Nominal Inductance | |
|--------------------|---------------|
| Example | Nominal Value |
| 4N7 | 4.7nH |
| 10N | 10nH |
| R10 | 100nH |

⑤

| Inductance Tolerance | |
|----------------------|--------|
| B | ±0.1nH |
| C | ±0.2nH |
| S | ±0.3nH |
| D | ±0.5nH |
| G | ±2% |
| H | ±3% |
| J | ±5% |

⑥

| Feature Type | |
|--------------|-------------------------------------|
| S | Sn Plating Five-faces Coating |

⑦

| Packing | |
|---------|-------------|
| T | Tape & Reel |

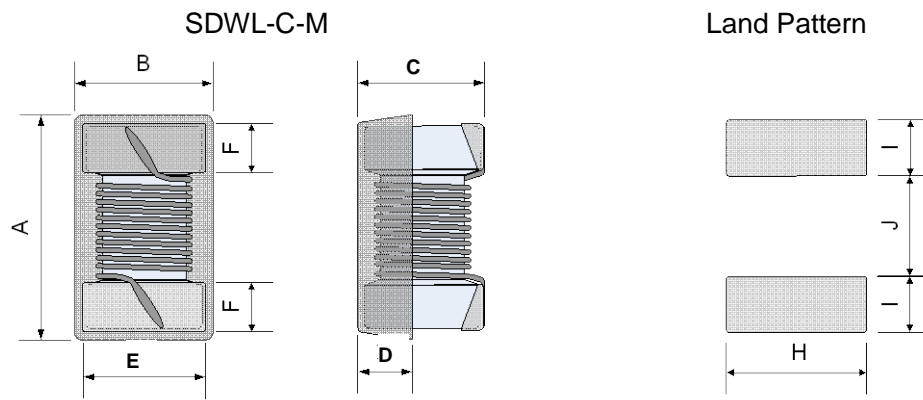
⑧

| Hazardous Substance Free Products |
|-----------------------------------|
| F |

⑨

| Internal Code | |
|---------------|---------------|
| M01/M11 | Internal Code |

SHAPE AND DIMENSIONS



Unit: mm

| Series | A | B | C | D Typ. | E | F | H Typ. | I Typ. | J Typ. |
|-------------|---------|---------|---------|--------|----------|---------|--------|--------|--------|
| SDWL1608C-M | 1.6±0.2 | 0.9±0.2 | 0.8±0.2 | 0.38 | 0.8±0.15 | 0.3±0.1 | 1.02 | 0.64 | 0.64 |

SPECIFICATIONS

SDWL1608C-M01 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 | MHz |
| Symbol | L | - | Q | Freq. | DCR | I _r | S.R.F |
| SDWL1608C2N2□STFM01 | 2.2 | C,D | 16 | 100/250 | 0.049 | 700 | 6000 |
| SDWL1608C3N6□STFM01 | 3.6 | C,D | 25 | 100/250 | 0.059 | 850 | 6000 |
| SDWL1608C3N9□STFM01 | 3.9 | C,D | 35 | 100/250 | 0.059 | 850 | 6000 |
| SDWL1608C4N3□STFM01 | 4.3 | C,D | 35 | 100/250 | 0.059 | 850 | 6000 |
| SDWL1608C4N5□STFM01 | 4.5 | C,D | 35 | 100/250 | 0.059 | 850 | 6000 |
| SDWL1608C4N7□STFM01 | 4.7 | C,D | 35 | 100/250 | 0.059 | 850 | 6000 |
| SDWL1608C5N6□STFM01 | 5.6 | C,D | 35 | 100/250 | 0.082 | 750 | 6000 |
| SDWL1608C6N2□STFM01 | 6.2 | C,D | 35 | 100/250 | 0.082 | 750 | 6000 |
| SDWL1608C6N8□STFM01 | 6.8 | C,D | 35 | 100/250 | 0.082 | 750 | 6000 |
| SDWL1608C7N5□STFM01 | 7.5 | C,D | 35 | 100/250 | 0.082 | 750 | 6000 |
| SDWL1608C8N2□STFM01 | 8.2 | C,D | 35 | 100/250 | 0.11 | 650 | 6000 |
| SDWL1608C8N7□STFM01 | 8.7 | C,D | 35 | 100/250 | 0.11 | 650 | 6000 |
| SDWL1608C9N1□STFM01 | 9.1 | C,D | 35 | 100/250 | 0.11 | 650 | 6000 |
| SDWL1608C9N5□STFM01 | 9.5 | C,D | 35 | 100/250 | 0.11 | 650 | 6000 |
| SDWL1608C10N□STFM01 | 10 | G,H,J | 35 | 100/250 | 0.11 | 650 | 6000 |
| SDWL1608C11N□STFM01 | 11 | G,H,J | 35 | 100/250 | 0.11 | 650 | 6000 |
| SDWL1608C12N□STFM01 | 12 | G,H,J | 35 | 100/250 | 0.13 | 600 | 6000 |

SPECIFICATIONS

SDWL1608C-M01 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 | MHz |
| Symbol | L | - | Q | Freq. | DCR | I _r | S.R.F |
| SDWL1608C13N□STFM01 | 13 | G,H,J | 35 | 100/250 | 0.13 | 600 | 6000 |
| SDWL1608C15N□STFM01 | 15 | G,H,J | 40 | 100/250 | 0.13 | 600 | 6000 |
| SDWL1608C16N□STFM01 | 16 | G,H,J | 40 | 100/250 | 0.16 | 550 | 5500 |
| SDWL1608C18N□STFM01 | 18 | G,H,J | 40 | 100/250 | 0.16 | 550 | 5500 |
| SDWL1608C20N□STFM01 | 20 | G,H,J | 40 | 100/250 | 0.16 | 550 | 4900 |
| SDWL1608C22N□STFM01 | 22 | G,H,J | 40 | 100/250 | 0.17 | 500 | 4600 |
| SDWL1608C24N□STFM01 | 24 | G,H,J | 40 | 100/250 | 0.21 | 500 | 3800 |
| SDWL1608C27N□STFM01 | 27 | G,H,J | 40 | 100/250 | 0.21 | 440 | 3700 |
| SDWL1608C30N□STFM01 | 30 | G,H,J | 40 | 100/250 | 0.23 | 420 | 3300 |
| SDWL1608C33N□STFM01 | 33 | G,H,J | 40 | 100/250 | 0.23 | 420 | 3200 |
| SDWL1608C36N□STFM01 | 36 | G,H,J | 40 | 100/250 | 0.26 | 400 | 2900 |
| SDWL1608C39N□STFM01 | 39 | G,H,J | 40 | 100/250 | 0.26 | 400 | 2800 |
| SDWL1608C43N□STFM01 | 43 | G,H,J | 40 | 100/200 | 0.29 | 380 | 2700 |
| SDWL1608C47N□STFM01 | 47 | G,H,J | 38 | 100/200 | 0.29 | 380 | 2600 |
| SDWL1608C51N□STFM01 | 51 | G,H,J | 38 | 100/200 | 0.33 | 370 | 2500 |
| SDWL1608C56N□STFM01 | 56 | G,H,J | 38 | 100/200 | 0.35 | 360 | 2400 |
| SDWL1608C62N□STFM01 | 62 | G,H,J | 38 | 100/200 | 0.51 | 280 | 2300 |
| SDWL1608C68N□STFM01 | 68 | G,H,J | 38 | 100/200 | 0.38 | 340 | 2200 |
| SDWL1608C72N□STFM01 | 72 | G,H,J | 34 | 100/150 | 0.56 | 270 | 2100 |
| SDWL1608C75N□STFM01 | 75 | G,H,J | 34 | 100/150 | 0.56 | 270 | 2050 |
| SDWL1608C82N□STFM01 | 82 | G,H,J | 34 | 100/150 | 0.60 | 250 | 2000 |
| SDWL1608C91N□STFM01 | 91 | G,H,J | 34 | 100/150 | 0.64 | 230 | 1900 |
| SDWL1608CR10□STFM01 | 100 | G,H,J | 34 | 100/150 | 0.68 | 220 | 1800 |
| SDWL1608CR11□STFM01 | 110 | G,H,J | 32 | 100/150 | 1.2 | 200 | 1700 |
| SDWL1608CR12□STFM01 | 120 | G,H,J | 32 | 100/150 | 1.3 | 180 | 1600 |
| SDWL1608CR13□STFM01 | 130 | G,H,J | 32 | 100/150 | 1.4 | 170 | 1450 |
| SDWL1608CR15□STFM01 | 150 | G,H,J | 32 | 100/150 | 1.5 | 160 | 1400 |
| SDWL1608CR16□STFM01 | 160 | G,H,J | 32 | 100/150 | 2.1 | 150 | 1350 |
| SDWL1608CR18□STFM01 | 180 | G,H,J | 25 | 100 | 2.2 | 140 | 1300 |
| SDWL1608CR20□STFM01 | 200 | G,H,J | 25 | 100 | 2.4 | 120 | 1250 |
| SDWL1608CR22□STFM01 | 220 | G,H,J | 25 | 100 | 2.5 | 120 | 1200 |
| SDWL1608CR27□STFM01 | 270 | G,H,J | 30 | 100 | 3.4 | 110 | 960 |
| SDWL1608CR33□STFM01 | 330 | G,H,J | 30 | 100 | 5.5 | 85 | 800 |
| SDWL1608CR39□STFM01 | 390 | G,H,J | 30 | 100 | 6.2 | 80 | 800 |
| SDWL1608CR47□STFM01 | 470 | G,H,J | 30 | 100 | 7.0 | 75 | 700 |

SDWL1608C-M11 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 | MHz |
| Symbol | L | - | Q | Freq. | DCR | I _r | S.R.F |
| SDWL1608C2N2□STFM11 | 2.2 | C,D | 18 | 100/250 | 0.018 | 1400 | >6000 |
| SDWL1608C3N9□STFM11 | 3.9 | C,D | 38 | 100/250 | 0.032 | 1000 | >6000 |
| SDWL1608C5N6□STFM11 | 5.6 | C,D | 38 | 100/250 | 0.045 | 900 | >6000 |
| SDWL1608C6N8□STFM11 | 6.8 | C,D | 38 | 100/250 | 0.045 | 900 | >6000 |
| SDWL1608C8N2□STFM11 | 8.2 | S,D | 38 | 100/250 | 0.058 | 800 | >6000 |



Specifications subject to change without notice. Please check our website for latest information. Revised 2019/04/01

SPECIFICATIONS

SDWL1608C-M11 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 | MHz |
| Symbol | L | - | Q | Freq. | DCR | I _r | S.R.F |
| SDWL1608C10N□STFM11 | 10 | G,H,J | 38 | 100/250 | 0.070 | 800 | 5000 |
| SDWL1608C12N□STFM11 | 12 | G,H,J | 38 | 100/250 | 0.071 | 750 | 5000 |
| SDWL1608C15N□STFM11 | 15 | G,H,J | 42 | 100/250 | 0.085 | 700 | 4500 |
| SDWL1608C18N□STFM11 | 18 | G,H,J | 42 | 100/250 | 0.085 | 700 | 3500 |
| SDWL1608C22N□STFM11 | 22 | G,H,J | 42 | 100/250 | 0.099 | 640 | 3200 |
| SDWL1608C27N□STFM11 | 27 | G,H,J | 42 | 100/250 | 0.116 | 590 | 2800 |
| SDWL1608C33N□STFM11 | 33 | J | 42 | 100/250 | 0.132 | 550 | 2500 |

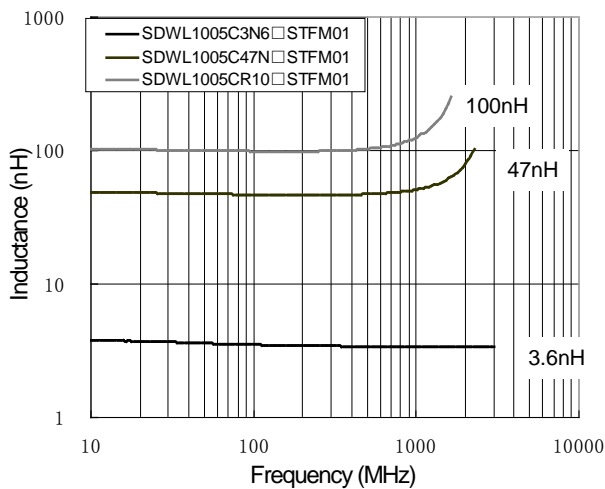
※□: Please specify the inductance tolerance code (B=±0.1nH,C=±0.2nH, S=±0.2nH,D=±0.5nH,G=±2%,H=±3%,J=±5%).

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

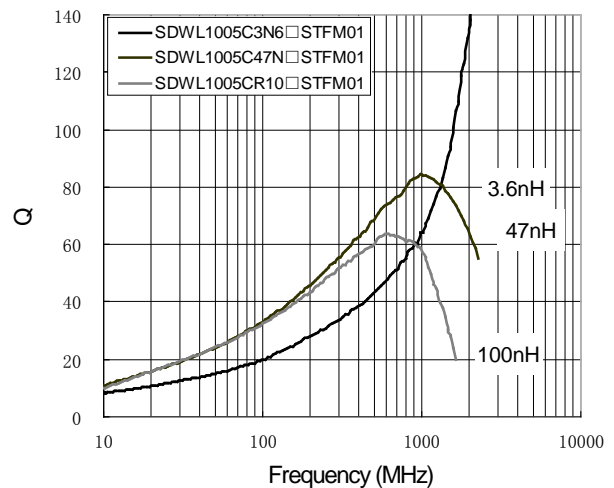
TYPICAL ELECTRICAL CHARACTERISTICS

SDWL1005C-M TYPE

Inductance vs. Frequency Characteristics

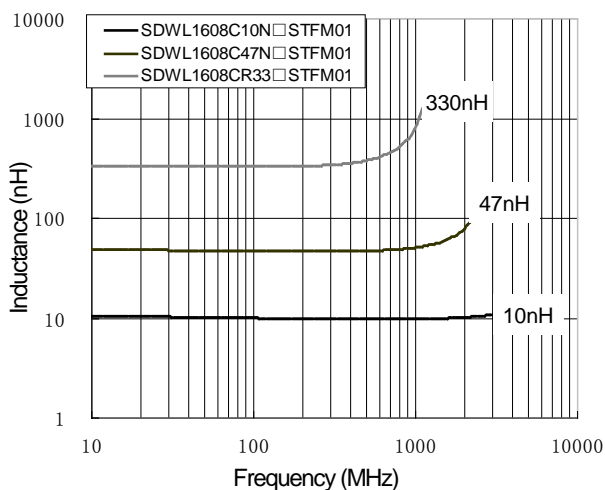


Q vs. Frequency Characteristics



SDWL1608C-M TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

