

Wire Wound Chip Ceramic Inductor – SDWL-C 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 stable inductance

APPLICATIONS

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

PRODUCT IDENTIFICATION

①

| Type |
|--|
| SDWL Wire Wound Chip t6p 6We3 10.y2p0.y96p84.9680.y2p 0 48.5 1.5105(t6p845.945)-152.88 1.5 ref2485.94 |

SPECIFICATIONS

SDWL1005C-S 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 |
| SDWL1005C13N□STF | 13 | G,H,J,K | 24 | 250 | 0.18 | 460 | 5000 |
| SDWL1005C14N□STF | 14 | G,H,J,K | 26 | 250 | 0.21 | 430 | 5000 |
| SDWL1005C15N□STF | 15 | G,H,J,K | 26 | 250 | 0.21 | 430 | 5000 |
| SDWL1005C16N□STF | 16 | G,H,J,K | 25 | 250 | 0.28 | 370 | 4500 |
| SDWL1005C18N□STF | 18 | G,H,J,K | 25 | 250 | 0.28 | 370 | 4500 |
| SDWL1005C19N□STF | 19 | G,H,J,K | 26 | 250 | 0.24 | 400 | 4000 |
| SDWL1005C20N□STF | 20 | G,H,J,K | 26 | 250 | 0.24 | 400 | 4000 |
| SDWL1005C22N□STF | 22 | G,H,J,K | 25 | 250 | 0.36 | 330 | 4000 |
| SDWL1005C23N□STF | 23 | G,H,J,K | 25 | 250 | 0.36 | 330 | 3800 |
| SDWL1005C24N□STF | 24 | G,H,J,K | 25 | 250 | 0.36 | 330 | 3500 |
| SDWL1005C27N□STF | 27 | G,H,J,K | 25 | 250 | 0.38 | 320 | 3500 |
| SDWL1005C30N□STF | 30 | G,H,J,K | 25 | 250 | 0.38 | 320 | 3300 |
| SDWL1005C33N□STF | 33 | G,H,J,K | 24 | 250 | 0.55 | 260 | 3200 |
| SDWL1005C36N□STF | 36 | G,H,J,K | 25 | 250 | 0.60 | 250 | 3100 |
| SDWL1005C38N□STF | 38 | G,H,J,K | 25 | 250 | 0.60 | 250 | 3000 |
| SDWL1005C39N□STF | 39 | G,H,J,K | 25 | 250 | 0.60 | 250 | 3000 |
| SDWL1005C43N□STF | 43 | G,H,J,K | 25 | 250 | 0.68 | 240 | 3000 |
| SDWL1005C47N□STF | 47 | G,H,J,K | 25 | 250 | 0.95 | 200 | 2900 |
| SDWL1005C51N□STF | 51 | G,H,J,K | 25 | 250 | 0.95 | 200 | 2850 |
| SDWL1005C56N□STF | 56 | G,H,J,K | 25 | 250 | 1.05 | 190 | 2800 |
| SDWL1005C62N□STF | 62 | G,H,J,K | 25 | 250 | 1.05 | 190 | 2600 |
| SDWL1005C68N□STF | 68 | G,H,J,K | 25 | 250 | 1.35 | 170 | 2500 |
| SDWL1005C75N□STF | 75 | G,H,J,K | 24 | 250 | 1.75 | 140 | 2400 |
| SDWL1005C82N□STF | 82 | G,H,J,K | 25 | 250 | 1.90 | 140 | 2300 |
| SDWL1005C91N□STF | 91 | G,H,J,K | 25 | 250 | 1.95 | 140 | 2100 |
| SDWL1005CR10□STF | 100 | G,H,J,K | 24 | 250 | 2.06 | 130 | 1500 |
| SDWL1005CR11□STF | 110 | G,H,J,K | 25 | 250 | 2.38 | 120 | 1200 |
| SDWL1005CR12□STF | 120 | G,H,J,K | 25 | 250 | 2.66 | 110 | 1000 |

SDWL1608C-S 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 |
| SDWL1608C1N6□STF | 1.6 | S,D,K | 18 | 250 | 0.035 | 1150 | >6000 |
| SDWL1608C1N7□STF | 1.7 | C,S,D,J,K | 16 | 250 | 0.043 | 1000 | >6000 |
| SDWL1608C1N8□STF | 1.8 | C,S,D,J,K | 18 | 250 | 0.043 | 1000 | >6000 |
| SDWL1608C2N2□STF | 2.2 | S, D,K | 13 | 250 | 0.150 | 700 | >6000 |
| SDWL1608C2N7□STF | 2.7 | C,S,D,J,K | 25 | 250 | 0.043 | 1000 | >6000 |
| SDWL1608C3N3□STF | 3.3 | C,S,D,J,K | 25 | 250 | 0.059 | 850 | >6000 |
| SDWL1608C3N6□STF | 3.6 | C,S,D,J,K | 25 | 250 | 0.059 | 850 | >6000 |
| SDWL1608C3N9□STF | 3.9 | C,S,D,J,K | 25 | 250 | 0.059 | 850 | >6000 |
| SDWL1608C4N3□STF | 4.3 | C,S,D,J,K | 25 | 250 | 0.059 | 850 | >6000 |
| SDWL1608C4N7□STF | 4.7 | C,S,D,J,K | 25 | 250 | 0.065 | 800 | >6000 |
| SDWL1608C5N1□STF | 5.1 | C,S,D,J,K | 21 | 250 | 0.130 | 600 | >6000 |
| SDWL1608C6N2□STF | 6.2 | C,S,D,J,K | 29 | 250 | 0.095 | 700 | >6000 |

SPECIFICATIONS

SDWL1608C-S TYPE

| Part Number | Inductance | Tolerance | Min. Quality Factor | L/Q Test Freq. | Max. DC Resistance | Max. Rated Current | Min. |
|-------------|------------|-----------|---------------------|----------------|--------------------|--------------------|------|
| | | | | | | | |

SPECIFICATIONS

SDWL2012C 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 |
| SDWL2012C2N2□◎TF | 2.2 | G,H,J,K | 40 | 250/1500 | 0.10 | 600 | >6000 |
| SDWL2012C3N3□◎TF | 3.3 | G,H,J,K | 25 | 250/1500 | 0.20 | 600 | >6000 |
| SDWL2012C6N8□◎TF | 6.8 | G,H,J,K | 40 | 250/1000 | 0.11 | 600 | 5000 |
| SDWL2012C8N2□◎TF | 8.2 | G,H,J,K | 40 | 250/1000 | 0.19 | 600 | 4600 |
| SDWL2012C12N□◎TF | 12 | G,H,J,K | 40 | 250/500 | 0.15 | 600 | 4000 |
| SDWL2012C15N□◎TF | 15 | G,H,J,K | 40 | 250/500 | 0.17 | 600 | 2900 |
| SDWL2012C18N□◎TF | 18 | G,H,J,K | 50 | 250/500 | 0.20 | 600 | 3300 |
| SDWL2012C22N□◎TF | 22 | G,H,J,K | 55 | 250/500 | 0.22 | 500 | 2000 |
| SDWL2012C27N□◎TF | 27 | G,H,J,K | 55 | 250/500 | 0.25 | 500 | 2500 |
| SDWL2012C33N□◎TF | 33 | G,H,J,K | 60 | 250/500 | 0.27 | 500 | 2000 |
| SDWL2012C39N□◎TF | 39 | G,H,J,K | 60 | 250/500 | 0.29 | 500 | 2000 |
| SDWL2012C47N□◎TF | 47 | G,H,J,K | 50 | 200/500 | 0.31 | 500 | 1600 |
| SDWL2012C56N□◎TF | 56 | G,H,J,K | 55 | 200/500 | 0.32 | 500 | 1550 |
| SDWL2012C68N□◎TF | 68 | G,H,J,K | 55 | 200/500 | 0.38 | 500 | 1450 |
| SDWL2012C82N□◎TF | 82 | G,H,J,K | 50 | 150/500 | 0.42 | 400 | 1300 |
| SDWL2012CR10□◎TF | 100 | G,H,J,K | 50 | 150/500 | 0.46 | 400 | 1200 |
| SDWL2012CR12□◎TF | 120 | G,H,J,K | 50 | 150/250 | 0.51 | 400 | 1100 |
| SDWL2012CR15□◎TF | 150 | G,H,J,K | 50 | 100/250 | 0.56 | 400 | 920 |
| SDWL2012CR18□◎TF | 180 | G,H,J,K | 50 | 100/250 | 0.64 | 400 | 870 |
| SDWL2012CR22□◎TF | 220 | G,H,J,K | 45 | 100/250 | 1.10 | 400 | 850 |
| SDWL2012CR27□◎TF | 270 | G,H,J,K | 38 | 100/250 | 1.00 | 350 | 650 |
| SDWL2012CR33□◎TF | 330 | G,H,J,K | 40 | 100/250 | 1.40 | 310 | 600 |
| SDWL2012CR39□◎TF | 390 | G,H,J,K | 35 | 100/250 | 1.50 | 290 | 560 |
| SDWL2012CR47□◎TF | 470 | G,H,J,K | 33 | 50/100 | 1.72 | 250 | 375 |
| SDWL2012CR56□◎TF | 560 | G,H,J,K | 23 | 25/50 | 1.90 | 230 | 320 |
| SDWL2012CR62□◎TF | 620 | G,H,J,K | 23 | 25/50 | 1.95 | 200 | 280 |
| SDWL2012CR68□◎TF | 680 | G,H,J,K | 23 | 25/50 | 2.05 | 190 | 270 |
| SDWL2012CR75□◎TF | 750 | G,H,J,K | 23 | 25/50 | 2.10 | 180 | 240 |
| SDWL2012CR82□◎TF | 820 | G,H,J,K | 23 | 25/50 | 2.30 | 180 | 250 |
| SDWL2012CR91□◎TF | 910 | G,H,J,K | 22 | 25/50 | 2.40 | 160 | 230 |
| SDWL2012C1R0□◎TF | 1000 | G,H,J,K | 20 | 25/50 | 2.50 | 150 | 200 |

SDWL2520C 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 |
| SDWL2520C4N7□◎TF | 4.7 | G,H,J,K | 50 | 50/1500 | 0.11 | 1000 | >6000 |
| SDWL2520C10N□◎TF | 10 | G,H,J,K | 50 | 50/500 | 0.08 | 1000 | 4100 |
| SDWL2520C12N□◎TF | 12 | G,H,J,K | 50 | 50/500 | 0.09 | 1000 | 3300 |
| SDWL2520C15N□◎TF | 15 | G,H,J,K | 50 | 50/500 | 0.13 | 1000 | 2500 |
| SDWL2520C18N□◎TF | 18 | G,H,J,K | 50 | 50/350 | 0.11 | 1000 | 2500 |
| SDWL2520C22N□◎TF | 22 | G,H,J,K | 55 | 50/350 | 0.12 | 1000 | 2400 |
| SDWL2520C27N□◎TF | 27 | G,H,J,K | 55 | 50/350 | 0.13 | 1000 | 1600 |
| SDWL2520C33N□◎TF | 33 | G,H,J,K | 60 | 50/350 | 0.14 | 1000 | 1600 |
| SDWL2520C39N□◎TF | 39 | G,H,J,K | 50 | 50/350 | 0.15 | 1000 | 1500 |
| SDWL2520C47N□◎TF | 47 | G,H,J,K | 65 | 50/350 | 0.16 | 1000 | 1500 |

SPECIFICATIONS

SDWL2520C 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 |
| SDWL2520C56N□◎TF | 56 | G,H,J,K | 50 | 50/350 | 0.18 | 1000 | 1300 |
| SDWL2520C68N□◎TF | 68 | G,H,J,K | 65 | 50/350 | 0.21 | 1000 | 1200 |
| SDWL2520C82N□◎TF | 82 | G,H,J,K | 60 | 50/350 | 0.22 | 1000 | 800 |
| SDWL2520CR10□◎TF | 100 | G,H,J,K | 60 | 25/350 | 0.56 | 650 | 1000 |
| SDWL2520CR12□◎TF | 120 | G,H,J,K | 60 | 25/350 | 0.63 | 650 | 950 |
| SDWL2520CR15□◎TF | 150 | G,H,J,K | 50 | 25/100 | 0.62 | 580 | 800 |
| SDWL2520CR18□◎TF | 180 | G,H,J,K | 50 | 25/100 | 0.70 | 620 | 750 |
| SDWL2520CR22□◎TF | 220 | G,H,J,K | 50 | 25/100 | 0.80 | 500 | 630 |
| SDWL2520CR27□◎TF | 270 | G,H,J,K | 50 | 25/100 | 0.91 | 500 | 600 |
| SDWL2520CR33□◎TF | 330 | G,H,J,K | 50 | 25/100 | 1.05 | 450 | 530 |
| SDWL2520CR39□◎TF | 390 | G,H,J,K | 50 | 25/100 | 1.12 | 470 | 480 |
| SDWL2520CR47□◎TF | 470 | G,H,J,K | 50 | 25/100 | 1.19 | 470 | 450 |
| SDWL2520CR56□◎TF | 560 | G,H,J,K | 50 | 25/100 | 1.33 | 400 | 390 |
| SDWL2520CR62□◎TF | 620 | G,H,J,K | 45 | 25/100 | 1.40 | 300 | 375 |
| SDWL2520CR68□◎TF | 680 | G,H,J,K | 45 | 25/100 | 1.47 | 400 | 360 |
| SDWL2520CR75□◎TF | 750 | G,H,J,K | 45 | 25/100 | 1.54 | 360 | 360 |
| SDWL2520CR82□◎TF | 820 | G,H,J,K | 45 | 25/100 | 1.61 | 400 | 330 |
| SDWL2520CR91□◎TF | 910 | G,H,J,K | 35 | 25/50 | 1.68 | 380 | 295 |
| SDWL2520C1R0□◎TF | 1000 | G,H,J,K | 35 | 25/50 | 1.80 | 370 | 270 |
| SDWL2520C1R2□◎TF | 1200 | G,H,J,K | 35 | 7.9/50 | 2.0 | 310 | 200 |
| SDWL2520C1R5□◎TF | 1500 | G,H,J,K | 28 | 7.9/50 | 2.3 | 330 | 150 |
| SDWL2520C1R8□◎TF | 1800 | G,H,J,K | 28 | 7.9/50 | 2.6 | 300 | 120 |
| SDWL2520C2R2□◎TF | 2200 | G,H,J,K | 28 | 7.9/50 | 2.8 | 280 | 100 |
| SDWL2520C2R7□◎TF | 2700 | G,H,J,K | 22 | 7.9/25 | 3.2 | 290 | 90 |
| SDWL2520C3R3□◎TF | 3300 | G,H,J,K | 22 | 7.9/25 | 3.4 | 290 | 70 |
| SDWL2520C3R9□◎TF | 3900 | G,H,J,K | 17 | 7.9/25 | 3.6 | 260 | 60 |
| SDWL2520C4R7□◎TF | 4700 | G,H,J,K | 20 | 7.9/25 | 4.0 | 260 | 50 |
| SDWL2520C5R6□◎TF | 5600 | G,H,J,K | 20 | 7.9/25 | 5.7 | 240 | 40 |
| SDWL2520C6R8□◎TF | 6800 | G,H,J,K | 20 | 7.9/25 | 7.7 | 200 | 40 |
| SDWL2520C8R2□◎TF | 8200 | G,H,J,K | 20 | 7.9/25 | 10.7 | 150 | 30 |

SDWL3216C 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 |
| SDWL3216C3N3□◎TF | 3.3 | G,H,J,K | 20 | 100/300 | 0.07 | 1000 | 6200 |
| SDWL3216C6N8□◎TF | 6.8 | G,H,J,K | 30 | 100/300 | 0.07 | 1000 | 5500 |
| SDWL3216C10N□◎TF | 10 | G,H,J,K | 40 | 100/300 | 0.09 | 1000 | 4000 |
| SDWL3216C12N□◎TF | 12 | G,H,J,K | 40 | 100/300 | 0.09 | 1000 | 3200 |
| SDWL3216C15N□◎TF | 15 | G,H,J,K | 40 | 100/300 | 0.12 | 1000 | 3200 |
| SDWL3216C18N□◎TF | 18 | G,H,J,K | 45 | 100/300 | 0.12 | 1000 | 2800 |
| SDWL3216C22N□◎TF | 22 | G,H,J,K | 50 | 100/300 | 0.12 | 1000 | 2200 |
| SDWL3216C27N□◎TF | 27 | G,H,J,K | 50 | 100/300 | 0.12 | 1000 | 1800 |
| SDWL3216C33N□◎TF | 33 | G,H,J,K | 50 | 100/300 | 0.12 | 1000 | 1800 |
| SDWL3216C39N□◎TF | 39 | G,H,J,K | 50 | 100/300 | 0.12 | 1000 | 1800 |

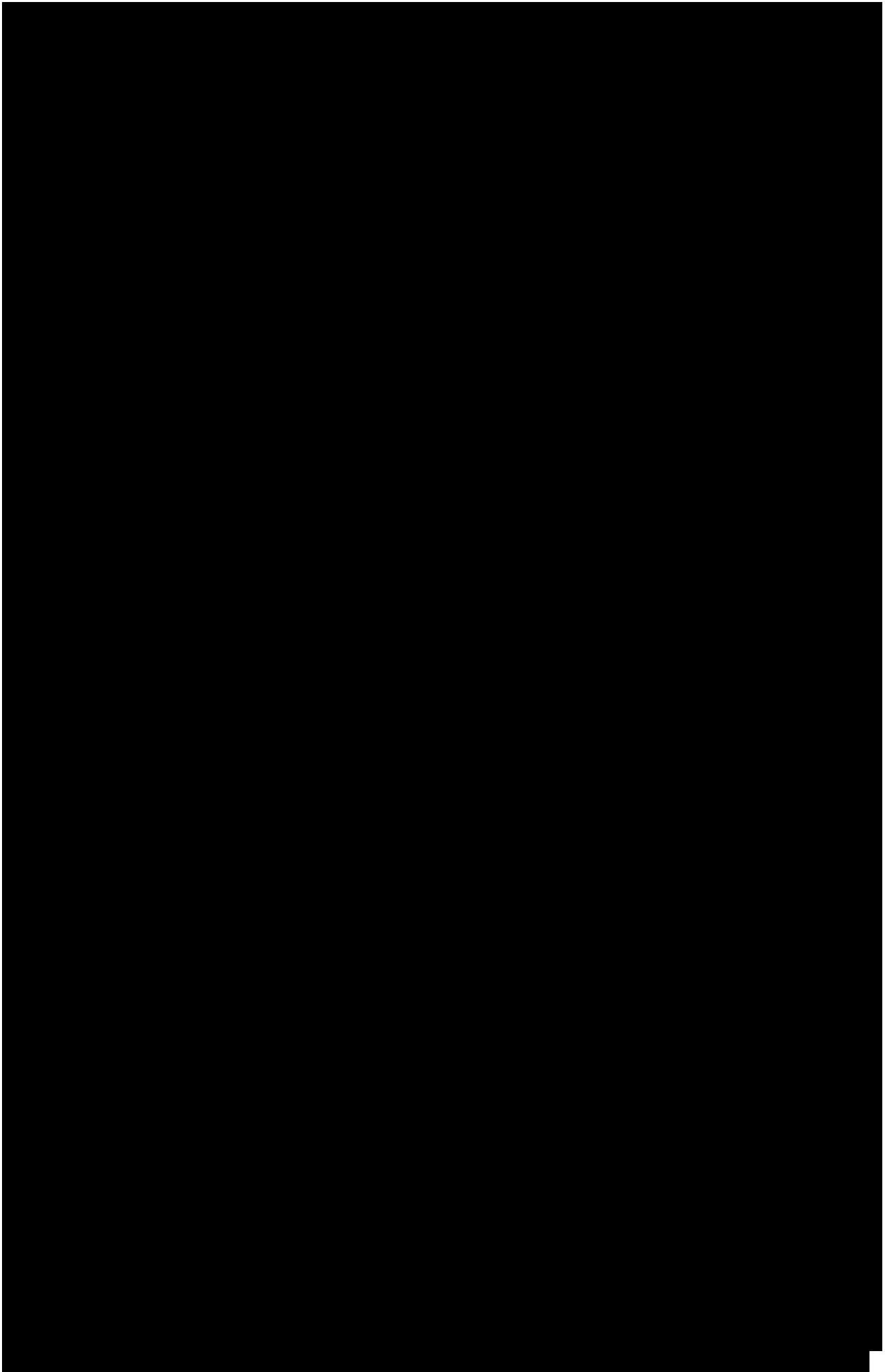
SPECIFICATIONS

SDWL3216C 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 |
| SDWL3216C47N□◎TF | 47 | G,H,J,K | 50 | 100/300 | 0.13 | 1000 | 1500 |
| SDWL3216C56N□◎TF | 56 | G,H,J,K | 55 | 100/300 | 0.14 | 1000 | 1450 |
| SDWL3216C68N□◎TF | 68 | G,H,J,K | 55 | 100/300 | 0.26 | 900 | 1200 |
| SDWL3216C82N□◎TF | 82 | G,H,J,K | 55 | 100/300 | 0.21 | 900 | 1200 |
| SDWL3216CR10□◎TF | 100 | G,H,J,K | 55 | 100/300 | 0.30 | 850 | 1100 |
| SDWL3216CR12□◎TF | 120 | G,H,J,K | 60 | 100/300 | 0.30 | 800 | 1100 |
| SDWL3216CR15□◎TF | 150 | G,H,J,K | 55 | 100/300 | 0.31 | 750 | 950 |
| SDWL3216CR18□◎TF | 180 | G,H,J,K | 60 | 50/300 | 0.43 | 700 | 900 |
| SDWL3216CR22□◎TF | 220 | G,H,J,K | 60 | 50/300 | 0.56 | 670 | 760 |
| SDWL3216CR27□◎TF | 270 | G,H,J,K | 50 | 50/300 | 0.56 | 630 | 730 |
| SDWL3216CR33□◎TF | 330 | G,H,J,K | 45 | 50/150 | 0.70 | 590 | 650 |
| SDWL3216CR39□◎TF | 390 | G,H,J,K | 45 | 50/150 | 0.80 | 530 | 600 |
| SDWL3216CR47□◎TF | 470 | G,H,J,K | 45 | 50/150 | 1.30 | 490 | 550 |
| SDWL3216CR56□◎TF | 560 | G,H,J,K | 45 | 35/150 | 1.34 | 460 | 470 |
| SDWL3216CR68□◎TF | 680 | G,H,J,K | 45 | 35/150 | 1.58 | 430 | 450 |
| SDWL3216CR82□◎TF | 820 | G,H,J,K | 45 | 35/150 | 1.82 | 400 | 420 |
| SDWL3216C1R0□◎TF | 1000 | G,H,J,K | 45 | 35/150 | 2.80 | 320 | 400 |
| SDWL3216C1R2□◎TF | 1200 | G,H,J,K | 45 | 35/150 | 3.20 | 300 | 380 |

DWL3225C TYPE

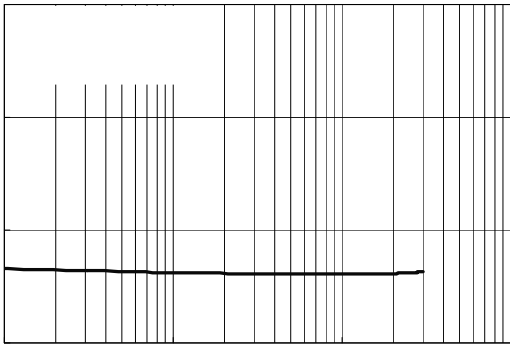
| Part Number | Inductance | Tolerance | Min. Quality Factor | L/Q Test Freq. | Max. DC Resistance | Max. Rated Current | Min. Self-resonant Frequency |
|------------------|------------|-----------|---------------------|----------------|--------------------|--------------------|------------------------------|
| Units | nH | - | - | MHz | Ω | mA | MHz |
| Symbol | L | - | Q | Freq. | DCR | I _r | S.R.F |
| SDWL3225C3N9□◎TF | 3.9 | G,H,J,K | 30 | 100/300 | 0.05 | 1000 | 6000 |
| SDWL3225C5N2□◎TF | 5.2 | G,H,J,K | 30 | 100/300 | 0.065 | 1000 | 5800 |
| SDWL3225C8N2□◎TF | 8.2 | G,H,J,K | 30 | 100/300 | 0.07 | 1000 | 5500 |



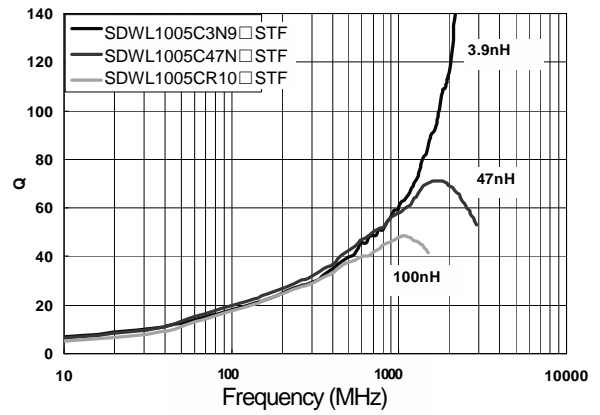
TYPICAL ELECTRICAL CHARACTERISTICS

SDWL1005C-S TYPE

Inductance vs. Frequency Characteristics

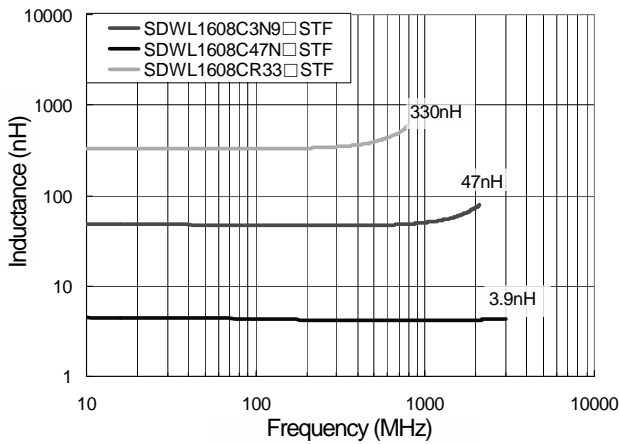


Q vs. Frequency Characteristics

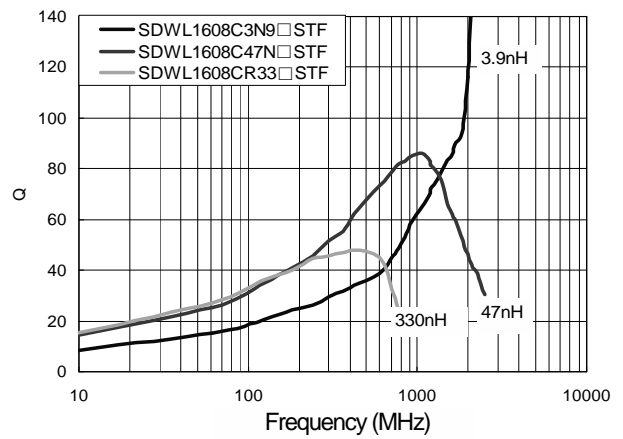


SDWL1608C-S TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



SDWL2012C TYPE

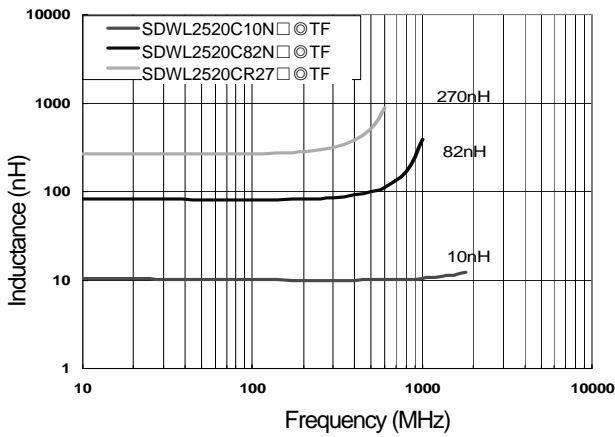
Inductance vs. Frequency Characteristics

Q vs. Frequency Characteristics

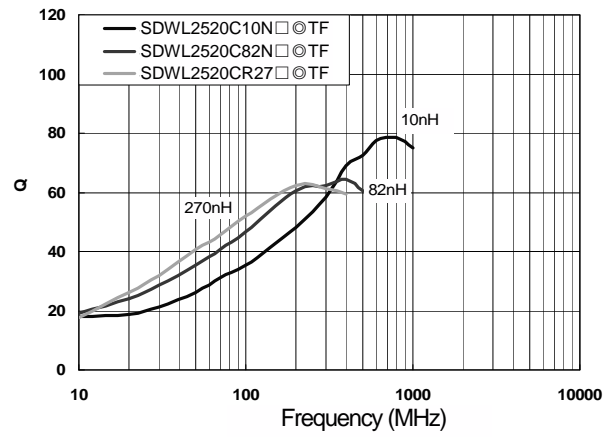
TYPICAL ELECTRICAL CHARACTERISTICS

SDWL2520C TYPE

Inductance vs. Frequency Characteristics

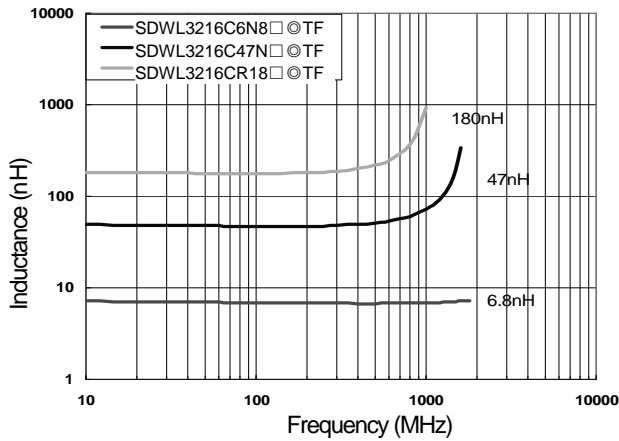


Q vs. Frequency Characteristics

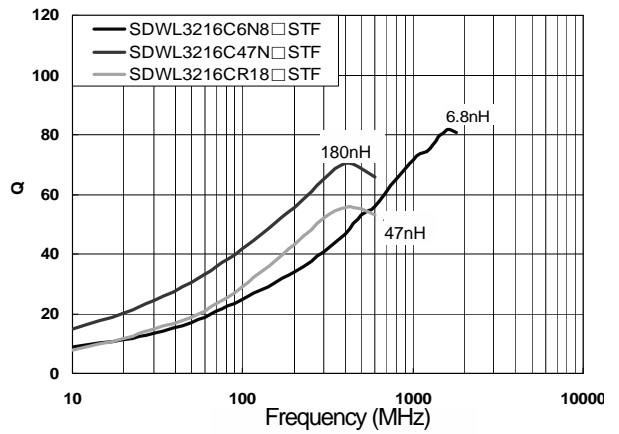


SDWL3216C TYPE

Inductance vs. Frequency Characteristics

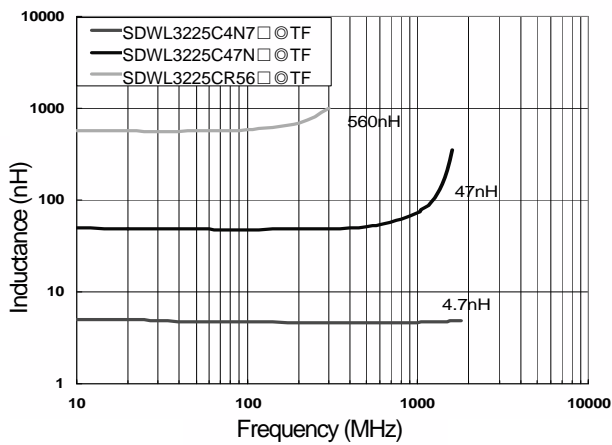


Q vs. Frequency Characteristics

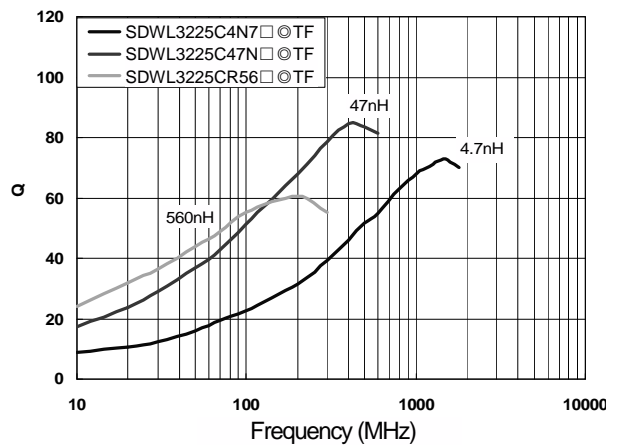


SDWL3225C TYPE

Inductance vs. Frequency Characteristics



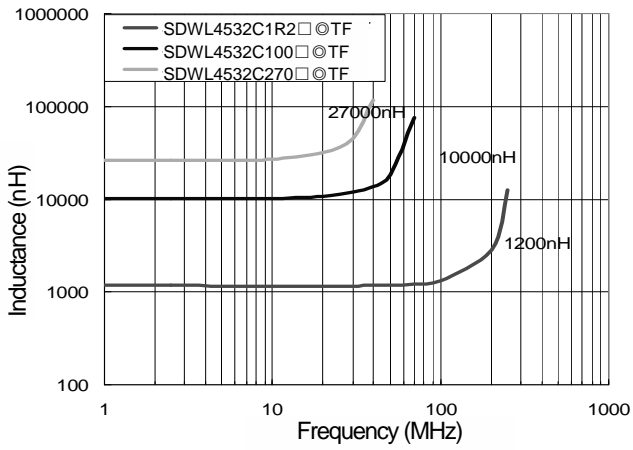
Q vs. Frequency Characteristics



TYPICAL ELECTRICAL CHARACTERISTICS

SDWL4532C TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics

