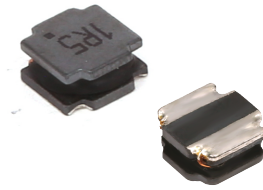


NRSC Series
SMD Shielded Tiny Power Inductor
Size 6028



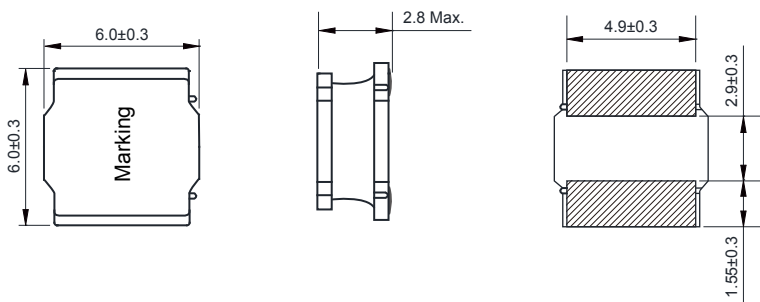
Features:

- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels
- Metallization on ferrite core results in excellent shock resistance and damage-free durability
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- 30% higher current rating than conventional inductors of equal size
- Takes up less PCB real estate and save more power
- Quantity: 2000 pcs

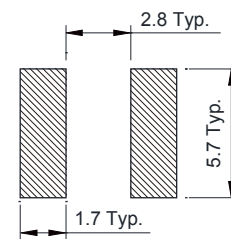
Application:

- LED Lighting
- Next-generation mobile devices with multifunction such as mobile TV and digital movie cameras
- Flat-screen TVs, blue-ray disc recorders, set top box
- Notebooks, desktop computers, servers, graphic cards cards
- Portable gaming devices, personal navigation systems, personal multimedia devices
- Automotive systems
- Telecomm base stations

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

| Part No | Inductance (μH) | Tolerance | Saturation current (A) | Temperature Rise Current (A) | DCR ±30% (Ω) | S.R.F Min. (MHz) |
|---------------|-----------------|-----------|------------------------|------------------------------|--------------|------------------|
| NRSC6028-1R0N | 1.0 | ±30% | 5.75 | 5.20 | 0.010 | 70 |
| NRSC6028-1R5N | 1.5 | ±30% | 6.00 | 4.58 | 0.013 | 65 |
| NRSC6028-2R2N | 2.2 | ±30% | 5.10 | 3.75 | 0.020 | 48 |
| NRSC6028-2R7N | 2.7 | ±30% | 3.80 | 3.75 | 0.020 | 48 |
| NRSC6028-3R3N | 3.3 | ±30% | 4.15 | 3.48 | 0.025 | 41 |
| NRSC6028-4R7N | 4.7 | ±30% | 3.00 | 3.08 | 0.030 | 35 |
| NRSC6028-5R1N | 5.1 | ±30% | 3.20 | 2.60 | 0.043 | 32 |
| NRSC6028-6R2M | 6.2 | ±20% | 3.05 | 2.40 | 0.047 | 30 |
| NRSC6028-6R8M | 6.8 | ±20% | 2.60 | 2.40 | 0.047 | 27 |
| NRSC6028-8R2M | 8.2 | ±20% | 2.30 | 2.25 | 0.055 | 24 |
| NRSC6028-9R1M | 9.1 | ±20% | 2.55 | 2.15 | 0.074 | 24 |
| NRSC6028-100M | 10 | ±20% | 2.04 | 1.95 | 0.072 | 23 |
| NRSC6028-120M | 12 | ±20% | 1.80 | 1.85 | 0.080 | 18 |
| NRSC6028-150M | 15 | ±20% | 1.75 | 1.45 | 0.125 | 18 |

| Part No | Inductance (μH) | Tolerance | Saturation current (A) | Temperature Rise Current (A) | DCR ±30% (Ω) | S.R.F Min. (MHz) |
|---------------|-----------------|-----------|------------------------|------------------------------|--------------|------------------|
| NRSC6028-180M | 18 | ±20% | 1.52 | 1.45 | 0.120 | 15 |
| NRSC6028-220M | 22 | ±20% | 1.45 | 1.40 | 0.140 | 14 |
| NRSC6028-270M | 27 | ±20% | 1.50 | 1.32 | 0.155 | 13 |
| NRSC6028-330M | 33 | ±20% | 1.35 | 1.22 | 0.185 | 12 |
| NRSC6028-360M | 36 | ±20% | 1.25 | 1.13 | 0.215 | 11 |
| NRSC6028-390M | 39 | ±20% | 1.25 | 1.10 | 0.225 | 11 |
| NRSC6028-470M | 47 | ±20% | 1.15 | 1.06 | 0.315 | 9.5 |
| NRSC6028-680M | 68 | ±20% | 0.80 | 0.86 | 0.360 | 7.7 |
| NRSC6028-750M | 75 | ±20% | 0.90 | 0.81 | 0.410 | 7.7 |
| NRSC6028-820M | 82 | ±20% | 0.80 | 0.70 | 0.500 | 7.7 |
| NRSC6028-101M | 100 | ±20% | 0.65 | 0.70 | 0.500 | 7.1 |

Inductance tested at 100kHz, 1Vrms.

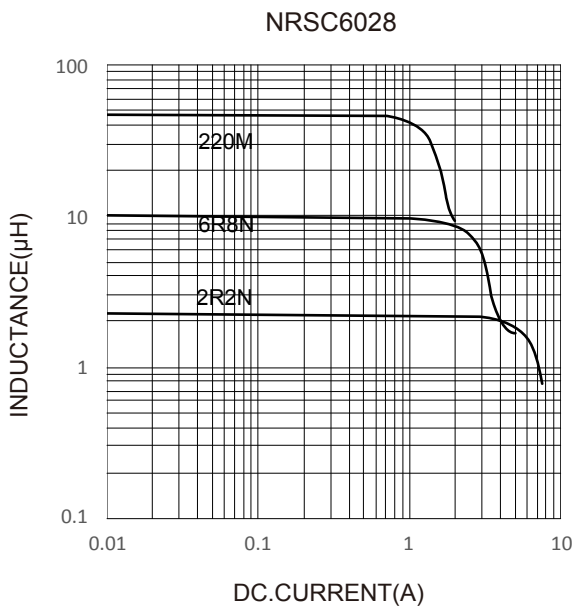
Operating temperature : -40°C ~ +125°C

Temperature rise current: the actual value of DC current when the temperature rise is ΔT40°C

Saturation Current that will cause initial inductance to drop approximately 30%

Typical Electrical Characteristics:

Inductance VS. DC.Current Characteristics:



Temperture Rise VS. DC.Current Characteristics:

