

**NRSC Series**  
**SMD Shielded Tiny Power Inductor**  
**Size 6028**



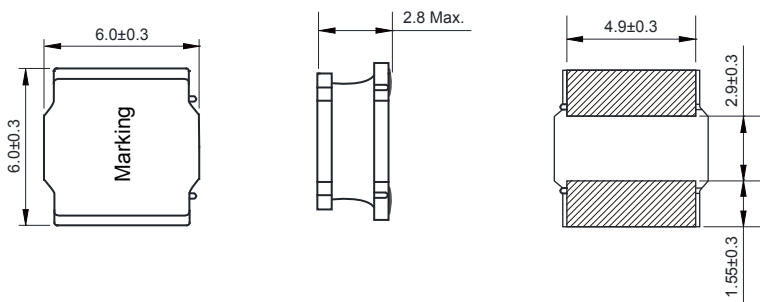
**Features:**

- 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

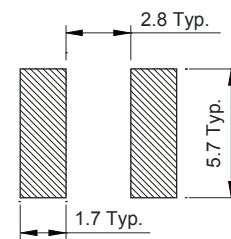
**Application:**

- 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.

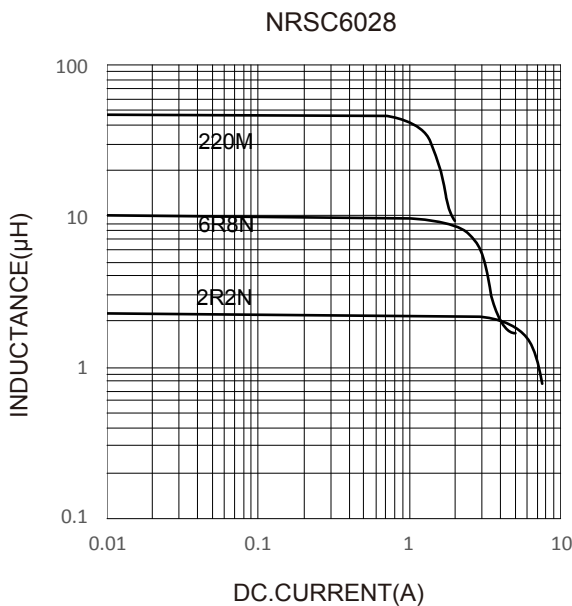
Operating temperature : -40°C ~ +125°C

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:

