

NRSC Series
SMD Shielded Tiny Power Inductor
Size 5020



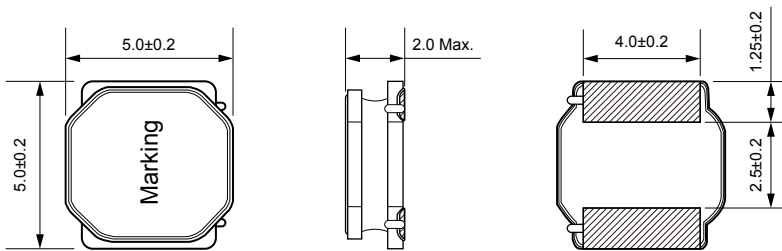
Features:

- 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

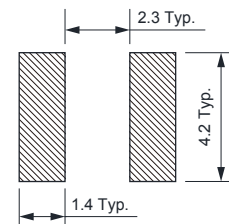
Application:

- 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 ±20% (Ω)	S.R.F Min. (MHz)
NRSC5020-R47N	0.47	±30%	6.15	4.60	0.013	160
NRSC5020-R75N	0.75	±30%	5.50	4.00	0.017	117
NRSC5020-1R0N	1.0	±30%	4.10	3.80	0.020	114
NRSC5020-1R2N	1.2	±30%	4.50	3.55	0.022	83
NRSC5020-1R5N	1.5	±30%	4.10	3.20	0.026	68
NRSC5020-2R2N	2.2	±30%	3.20	2.90	0.032	57
NRSC5020-2R7N	2.7	±30%	2.90	2.70	0.038	52
NRSC5020-3R0N	3.0	±30%	2.55	2.70	0.038	49
NRSC5020-3R3N	3.3	±30%	2.55	2.50	0.043	46
NRSC5020-3R6N	3.6	±30%	2.80	2.50	0.043	43
NRSC5020-3R9N	3.9	±30%	2.30	2.50	0.043	40
NRSC5020-4R3M	4.3	±20%	2.50	2.20	0.057	37
NRSC5020-4R7M	4.7	±20%	2.50	2.20	0.057	37
NRSC5020-5R1M	5.1	±20%	2.25	2.05	0.064	32

Part No	Inductance (μH)	Tolerance	Saturation current (A)	Temperature Rise Current (A)	DCR ±20% (Ω)	S.R.F Min. (MHz)
NRSC5020-5R6M	5.6	±20%	2.30	2.05	0.064	32
NRSC5020-6R8M	6.8	±20%	2.05	1.80	0.083	30
NRSC5020-7R5M	7.5	±20%	1.85	1.75	0.090	26
NRSC5020-8R2M	8.2	±20%	1.85	1.65	0.098	26
NRSC5020-9R1M	9.1	±20%	1.70	1.55	0.110	24
NRSC5020-100M	10	±20%	1.70	1.55	0.110	24
NRSC5020-120M	12	±20%	1.50	1.40	0.140	22
NRSC5020-150M	15	±20%	1.35	1.25	0.165	20
NRSC5020-180M	18	±20%	1.25	1.15	0.200	16
NRSC5020-220M	22	±20%	1.15	1.10	0.226	14

Inductance tested at 100kHz, 1Vrms.

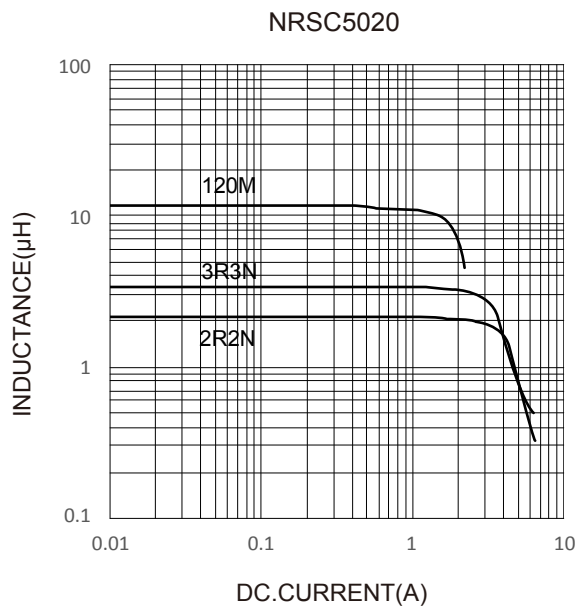
Operating temperature : -40°C ~ +125°C

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:

