

**NRSC Series**  
**SMD Shielded Tiny Power Inductor**  
**Size 5040**



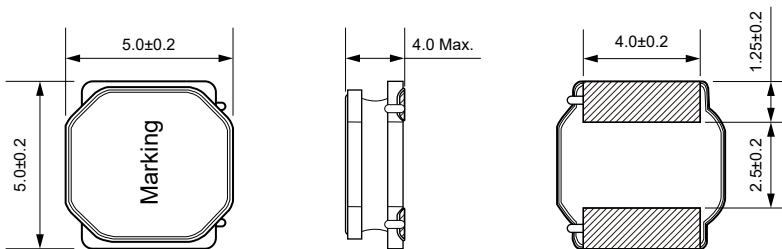
**Features:**

- 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

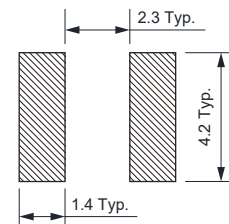
**Application:**

- 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)
NRSC5040-1R0N	1.0	±30%	7.35	4.90	0.012	117
NRSC5040-1R5N	1.5	±30%	6.30	4.30	0.015	86
NRSC5040-2R2N	2.2	±30%	4.90	3.80	0.019	50
NRSC5040-2R7N	2.7	±30%	4.30	3.60	0.022	37
NRSC5040-3R3N	3.3	±30%	3.95	3.40	0.024	32
NRSC5040-3R9N	3.9	±30%	3.55	3.20	0.027	29
NRSC5040-4R7N	4.7	±30%	3.50	3.00	0.030	28
NRSC5040-6R8M	6.8	±20%	2.90	2.50	0.043	21
NRSC5040-100M	10	±20%	2.35	2.10	0.064	18
NRSC5040-150M	15	±20%	2.00	2.00	0.086	13
NRSC5040-220M	22	±20%	1.60	1.50	0.129	11
NRSC5040-330M	33	±20%	1.30	1.20	0.188	9.1
NRSC5040-470M	47	±20%	1.10	1.00	0.272	6.7

Part No	Inductance (μH)	Tolerance	Saturation current (A)	Temperature Rise Current (A)	DCR ±20% (Ω)	S.R.F Min. (MHz)
NRSC5040-680M	68	±20%	0.90	0.80	0.400	5.7
NRSC5040-101M	100	±20%	0.75	0.70	0.560	4.7

Inductance tested at 100kHz, 1Vrms.

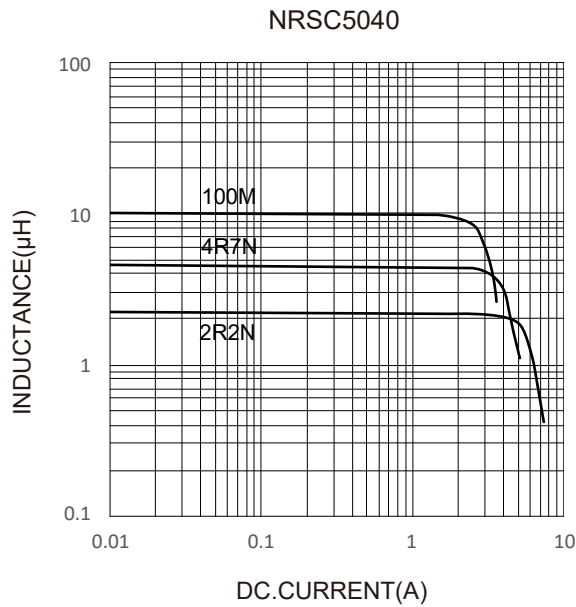
Operating temperature : -40°C ~ +125°C

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:

