

**NRSC Series**  
**SMD Shielded Tiny Power Inductor**  
**Size 3015**



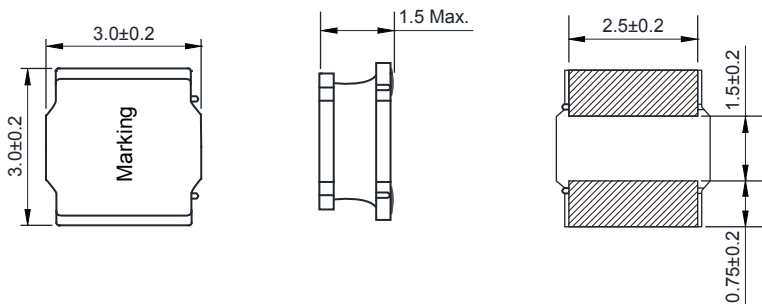
**Features:**

- 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

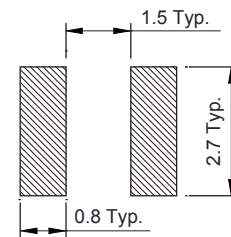
**Application:**

- 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)
NRSC3015-1R0N	1.0	±30%	2.32	2.35	0.030	150
NRSC3015-1R2N	1.2	±30%	2.21	1.95	0.040	110
NRSC3015-1R5N	1.5	±30%	2.30	1.70	0.050	100
NRSC3015-1R8N	1.8	±30%	1.75	1.70	0.050	92
NRSC3015-2R2N	2.2	±30%	1.60	1.60	0.060	86
NRSC3015-2R7N	2.7	±30%	1.52	1.43	0.075	64
NRSC3015-3R3M	3.3	±20%	1.32	1.36	0.080	68
NRSC3015-3R6M	3.6	±20%	1.28	1.20	0.105	59
NRSC3015-4R3M	4.3	±20%	1.20	1.14	0.115	53
NRSC3015-4R7M	4.7	±20%	1.10	1.09	0.125	46
NRSC3015-5R1M	5.1	±20%	1.00	1.05	0.133	49
NRSC3015-6R2M	6.2	±20%	1.00	0.86	0.195	46
NRSC3015-6R8M	6.8	±20%	0.85	0.85	0.200	39
NRSC3015-100M	10	±20%	0.72	0.77	0.250	41

Part No	Inductance (μH)	Tolerance	Saturation current (A)	Temperature Rise Current (A)	DCR ±30% (Ω)	S.R.F Min. (MHz)
NRSC3015-120M	12	±20%	0.70	0.68	0.320	32
NRSC3015-150M	15	±20%	0.66	0.65	0.350	30
NRSC3015-180M	18	±20%	0.56	0.59	0.430	23
NRSC3015-220M	22	±20%	0.52	0.57	0.460	23
NRSC3015-270M	27	±20%	0.48	0.45	0.730	22
NRSC3015-330M	33	±20%	0.44	0.43	0.820	20
NRSC3015-390M	39	±20%	0.41	0.39	0.995	14
NRSC3015-430M	43	±20%	0.37	0.37	1.060	16
NRSC3015-470M	47	±20%	0.35	0.35	1.250	14
NRSC3015-560M	56	±20%	0.33	0.34	1.280	13
NRSC3015-620M	62	±20%	0.30	0.30	1.610	13
NRSC3015-680M	68	±20%	0.28	0.23	2.700	11

Inductance tested at 100kHz, 1Vrms.

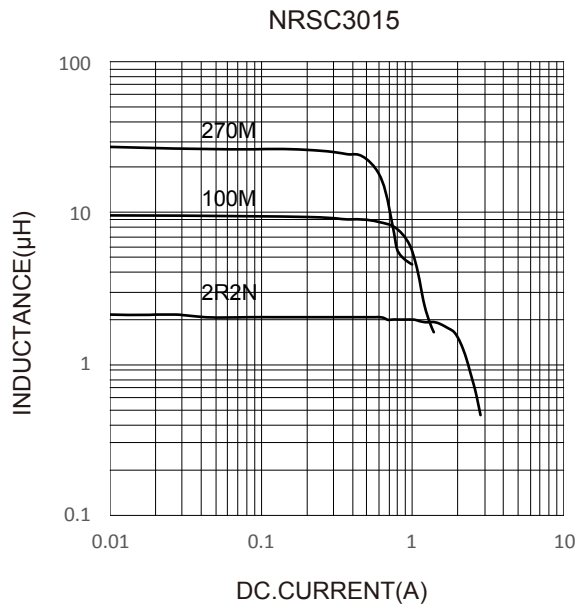
Operating temperature : -40°C ~ +125°C

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:

