

**NRSE Series**  
**SMD Shielded Tiny Power Inductor**  
**Size 8040**



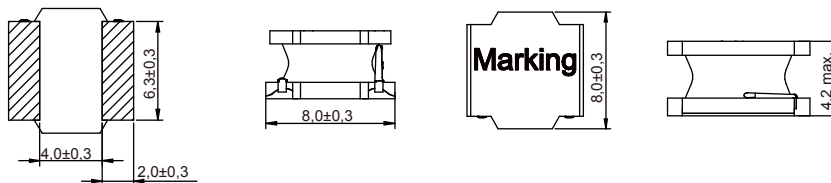
**CHARACTERISTICS**

- Magnetic resin for higher current and semi-magnetically shielded
- Different sizes from 2mm to 8mm in square shape
- Quantity: 1000pcs

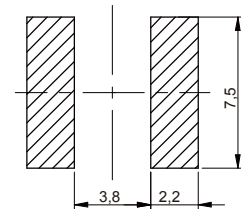
**APPLICATION**

- DC/DC converter
- LC filter

**Dimensions: [mm]**



**Land Pattern: [mm]**



**Electrical Properties:**

Part No	Inductance (µH)	Tolerance	Saturation current (A)	Temperature Rise Current (A)	DCR ±30% (mΩ)
NRSE8040-R56N	0.56	±30%	11.5	7.6	5
NRSE8040-1R0N	1.0	±30%	9.85	6.3	8
NRSE8040-1R5N	1.5	±30%	8.15	5.65	10
NRSE8040-2R2N	2.2	±30%	7.1	5.15	12
NRSE8040-3R3N	3.3	±30%	6.5	4.4	17
NRSE8040-4R7N	4.7	±30%	5.9	4.0	20
NRSE8040-5R6N	5.6	±30%	5.5	3.8	24
NRSE8040-6R8M	6.8	±20%	4.55	3.6	28
NRSE8040-8R2M	8.2	±20%	4.2	3.4	35
NRSE8040-100M	10	±20%	3.6	3.1	37
NRSE8040-120M	12	±20%	3.3	2.8	45
NRSE8040-150M	15	±20%	2.95	2.5	56
NRSE8040-180M	18	±20%	2.7	2.4	58
NRSE8040-220M	22	±20%	2.4	2	74
NRSE8040-270M	27	±20%	2.15	1.9	80
NRSE8040-330M	33	±20%	2.05	1.7	100
NRSE8040-470M	47	±20%	1.75	1.5	158
NRSE8040-560M	56	±20%	1.55	1.4	160

Part No	Inductance (μH)	Tolerance	Saturation current (A)	Temperature Rise Current (A)	DCR ±30% (mΩ)
NRSE8040-680M	68	±20%	1.45	1.2	196
NRSE8040-820M	82	±20%	1.3	1.1	245
NRSE8040-101M	100	±20%	1.15	1.0	295
NRSE8040-121M	120	±20%	1.0	0.9	380
NRSE8040-151M	150	±20%	1.1	0.8	470
NRSE8040-171M	170	±20%	0.95	0.75	538
NRSE8040-181M	180	±20%	0.9	0.75	610
NRSE8040-221M	220	±20%	0.85	0.7	660
NRSE8040-331M	330	±20%	0.68	0.55	970
NRSE8040-471M	470	±20%	0.6	0.48	1400
NRSE8040-681M	680	±20%	0.5	0.45	1750

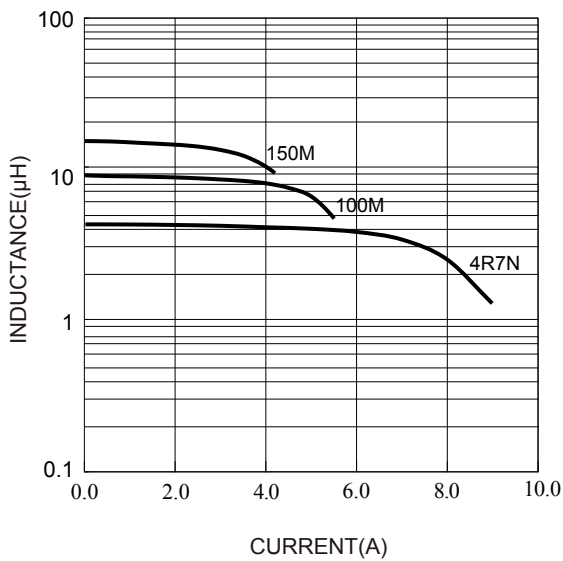
Operating temperature : -40 °C ~ +125 °C

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. Current Characteristics:



Temperature Rise VS. Current Characteristics:

