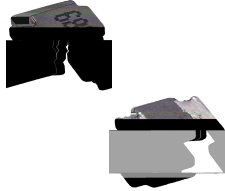


# NRSE Series

## SMD Shielded Tiny Power Inductor

### Size 8040



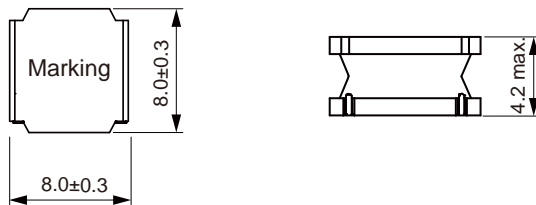
#### CHARACTERISTICS

- Magnetic resin for higher current and semi-magnetically shielded
- Quantity: 1000pcs

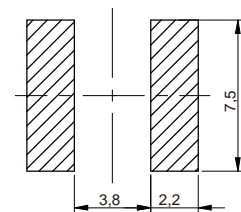
#### APPLICATION

- 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)	Test Condition
NRSE8040-R56N	0.56	±30%	11.5	7.60		1MHz/0.25V
NRSE8040-1R0N	1.0	±30%	9.85	6.30		100KHz/0.25V
NRSE8040-1R5N	1.5	±30%	8.15		10	100KHz/0.25V
NRSE8040-2R2N		±30%	7.10	5.15	12	100KHz/0.25V
NRSE8040-3R3N		±30%	6.50	4.40	17	100KHz/0.25V
NRSE8040-4R7N		±30%	5.90	4.00	20	100KHz/0.25V
NRSE8040-5R6N		±30%	5.50	3.80		100KHz/0.25V
NRSE8040-6R8M		±20%		3.60		100KHz/0.25V
NRSE8040-8R2M		±20%	4.20	3.40		100KHz/0.25V
NRSE8040-100M	10	±20%	3.60	3.10		100KHz/0.25V
NRSE8040-120M	12	±20%	3.30	2.80		100KHz/0.25V
NRSE8040-150M	15	±20%	2.95	2.50		100KHz/0.25V
NRSE8040-180M	18	±20%	2.70	2.40		100KHz/0.25V
NRSE8040-220M		±20%	2.40	2.00		100KHz/0.25V
NRSE8040-270M		±20%	2.15	1.90	80	100KHz/0.25V
NRSE8040-330M		±20%	2.05	1.70	100	100KHz/0.25V
NRSE8040-470M		±20%	1.75	1.50	158	100KHz/0.25V
NRSE8040-560M		±20%	1.55	1.40	160	100KHz/0.25V

Part No	Inductance (μH)	Tolerance	Saturation current (A)	Temperature Rise Current (A)	DCR ±30% (mΩ)	Test Condition
NRSE8040-680M		±20%	1.45	1.20	196	100KHz/0.25V
NRSE8040-820M		±20%	1.30	1.10		100KHz/0.25V
NRSE8040-101M	100	±20%	1.15	1.00	295	100KHz/0.25V
NRSE8040-121M	120	±20%	1.10	0.90	380	100KHz/0.25V
NRSE8040-151M	150	±20%	1.10	0.80	470	100KHz/0.25V
NRSE8040-171M	170	±20%	0.95	0.75		100KHz/0.25V
NRSE8040-181M	180	±20%	0.90	0.75	610	100KHz/0.25V
NRSE8040-221M	220	±20%	0.85	0.70	660	100KHz/0.25V
NRSE8040-331M	330	±20%	0.68	0.55	970	100KHz/0.25V
NRSE8040-471M	470	±20%	0.60	0.48	1400	100KHz/0.25V
NRSE8040-561M	560	±20%	0.59	0.46	1650	100KHz/0.25V
NRSE8040-681M	680	±20%	0.50	0.45	1750	100KHz/0.25V
NRSE8040-102M	1000	±20%	0.40	0.35	2900	100KHz/0.25V

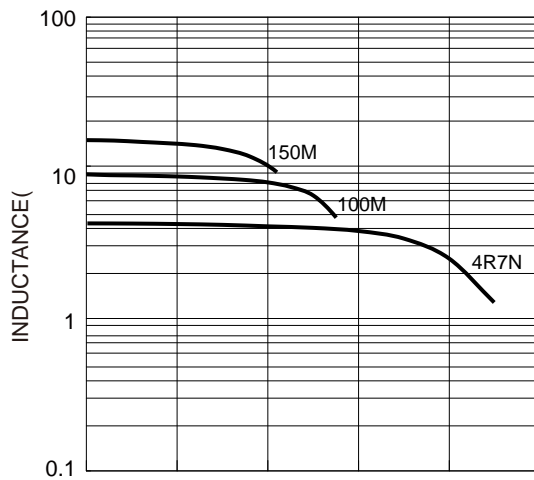
Operating temperature: -40°C ~ +125°C

Temperature rise current: the actual value of DC current when the temperature rise is  $\Delta T=40^{\circ}\text{C}$

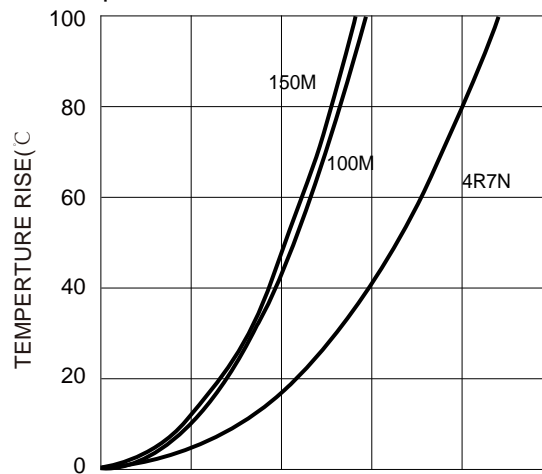
Saturation Current that will cause initial inductance to drop approximately 30%

## Typical Electrical Characteristics:

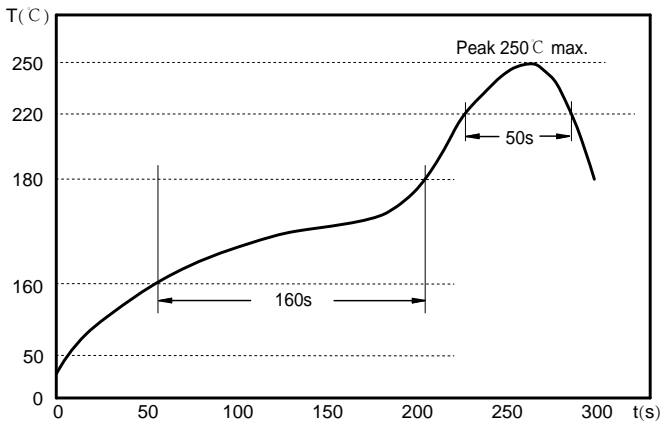
Inductance VS. Current Characteristics:



Temperature Rise VS. Current Characteristics:



## Soldering Reflow:



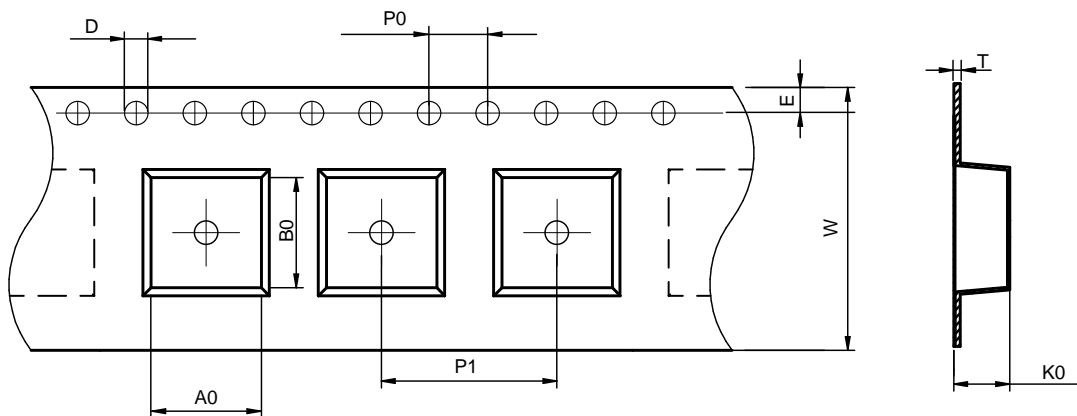
Preheat condition: 160 ~180°C / 160 sec.

Allowed time above 220°C : 50 sec.

Max temperature: 250°C.

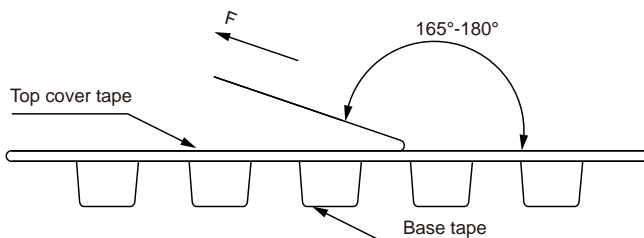
## Packaging Information:

### Tape Dimension :



Series	A0	B0	D	P0	P1	W	K0	E	T
NRSE8040	9.40±0.1	9.40±0.1	1.50±0.1	4.00±0.1	12.00±0.1	16.00±0.3	4.40±0.1	1.75±0.1	0.40±0.05

### Peel force of top cover tape:

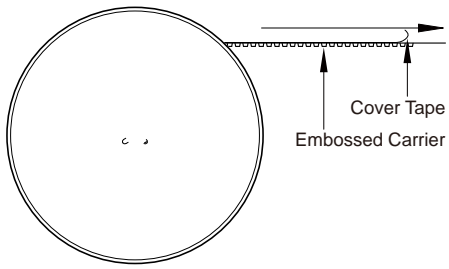


The peel force of top cover tape shall be between 0.03 to 0.98 N

### Product Marking:

Marking	Printing (Inductance)
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Reel Dimension: [mm]



Packaging Quantity: