

NRSE Series

SMD Shielded Tiny Power Inductor

Size 5020



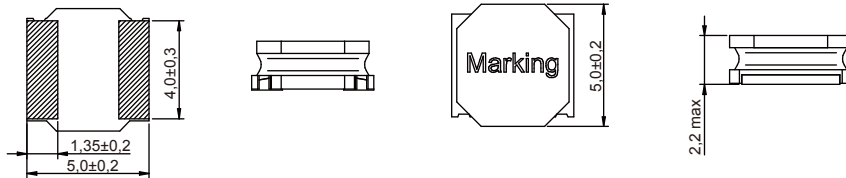
CHARACTERISTICS

- Magnetic resin for higher current and semi-magnetically shielded
- Different sizes from 2mm to 8mm in square shape
- Quantity: 3000pcs

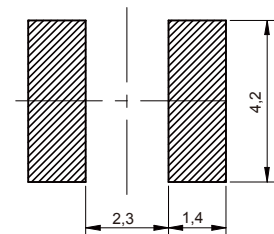
APPLICATION

- DC/DC converter
- LC filter

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

Part No	Inductance (μ H)	Tolerance	Saturation current (A)	Temperature Rise Current (A)	DCR $\pm 30\%$ (m Ω)
NRSE5020-R22N	0.22	$\pm 30\%$	6	5	11
NRSE5020-R24N	0.24	$\pm 30\%$	6	5	11
NRSE5020-R33N	0.33	$\pm 30\%$	7.5	3.95	15
NRSE5020-R47N	0.47	$\pm 30\%$	4.85	3.95	15
NRSE5020-1R0N	1.0	$\pm 30\%$	4.33	3.7	20
NRSE5020-1R2N	1.2	$\pm 30\%$	4.2	3.5	25
NRSE5020-1R5N	1.5	$\pm 30\%$	4.1	3.2	26
NRSE5020-1R8N	1.8	$\pm 30\%$	4.00	3	30
NRSE5020-2R2N	2.2	$\pm 30\%$	3.85	2.9	38
NRSE5020-2R7N	2.7	$\pm 30\%$	3.5	2.4	45
NRSE5020-3R3N	3.3	$\pm 30\%$	3.25	2.4	46
NRSE5020-3R6N	3.6	$\pm 30\%$	2.9	2.3	48
NRSE5020-3R9N	3.9	$\pm 30\%$	2.9	2.15	50
NRSE5020-4R7M	4.7	$\pm 20\%$	2.4	2.05	65
NRSE5020-5R6M	5.6	$\pm 20\%$	2.3	1.85	72
NRSE5020-6R8M	6.8	$\pm 20\%$	2.1	1.7	92
NRSE5020-8R2M	8.2	$\pm 20\%$	1.9	1.6	100

Part No	Inductance (μH)	Tolerance	Saturation current (A)	Temperature Rise Current (A)	DCR $\pm 30\%$ (m Ω)
NRSE5020-100M	10	$\pm 20\%$	1.8	1.5	125
NRSE5020-150M	15	$\pm 20\%$	1.44	1.25	180
NRSE5020-220M	22	$\pm 20\%$	1.18	1.05	250
NRSE5020-270M	27	$\pm 20\%$	1.1	1	300
NRSE5020-330M	33	$\pm 20\%$	0.97	0.83	370
NRSE5020-470M	47	$\pm 20\%$	0.81	0.7	560
NRSE5020-680M	68	$\pm 20\%$	0.70	0.53	850
NRSE5020-820M	82	$\pm 20\%$	0.65	0.5	950
NRSE5020-101M	100	$\pm 20\%$	0.57	0.43	1100
NRSE5020-151M	150	$\pm 20\%$	0.41	0.4	1500
NRSE5020-221M	220	$\pm 20\%$	0.35	0.3	2230

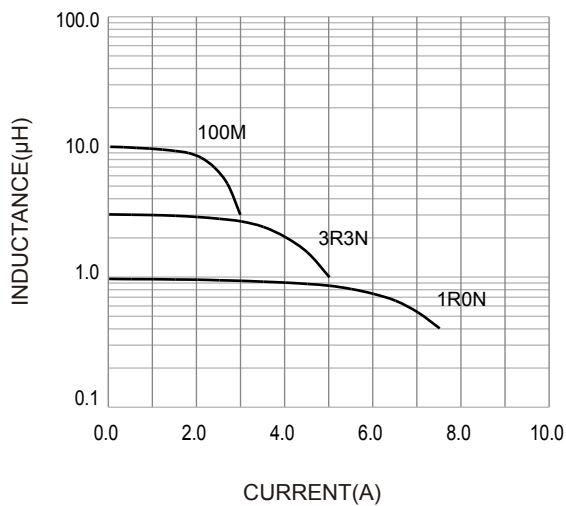
Operating temperature : $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$

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:



Temperture Rise VS. Current Characteristics:

