

**NRSA Series**  
**SMD Power Inductors For Automotive**  
**Size 6045**



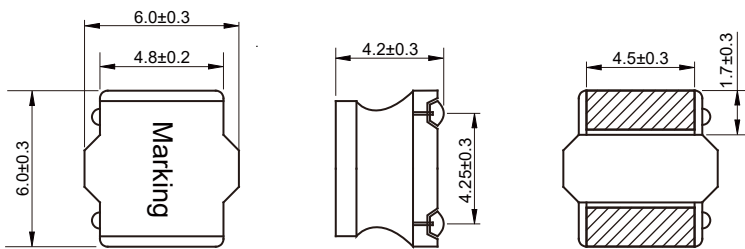
**FEATURES**

- Magnetic shield type wound inductor for power circuits using a ferrite magnetic material
- High magnetic shield construction and compatible with high-density mounting.
- Larger current and lower Rdc were achieved by optimizing the ferrite core figure.
- Operating temperature: -55 to +125°C(including self-temperature rise)
- High reliability -Reliability test meet AEC-Q200
- Quantity: 1000pcs

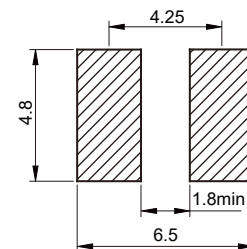
**APPLICATION**

- Car navigation, car stereo and car accessories only

Dimensions: [mm]



Land Pattern: [mm]



**Electrical Properties:**

Part No	L@1MHz/1V (μH)	Tolerance	I <sub>SAT</sub> Typ. (A)	I <sub>SAT</sub> Max. (A)	I <sub>r</sub> Typ. (A)	I <sub>r</sub> Max. (A)	R <sub>DC</sub> ±20% (mΩ)
NRSA6045-R36M	0.36	±20%	18.00	16.50	9.00	8.50	4.8
NRSA6045-R47M	0.47	±20%	17.00	16.00	8.60	8.00	6.8
NRSA6045-R82M	0.82	±20%	14.50	13.50	8.20	7.50	8.5
NRSA6045-1R0M	1.0	±20%	13.50	12.50	8.00	7.30	10.0
NRSA6045-1R2M	1.2	±20%	12.50	11.50	7.50	7.00	10.5
NRSA6045-1R3M	1.3	±20%	12.50	11.50	7.50	7.00	10.5
NRSA6045-1R5M	1.5	±20%	12.00	11.00	7.00	6.60	11.7
NRSA6045-1R8M	1.8	±20%	11.00	10.00	6.80	6.20	12.0
NRSA6045-2R0M	2.0	±20%	10.50	9.50	6.50	5.80	13.5
NRSA6045-2R2M	2.2	±20%	9.50	8.55	6.00	5.30	15.0
NRSA6045-2R3M	2.3	±20%	9.30	8.20	5.80	5.00	16.0
NRSA6045-3R0M	3.0	±20%	8.00	7.50	5.20	4.60	20.0
NRSA6045-3R3M	3.3	±20%	7.80	7.30	5.00	4.50	21.0
NRSA6045-3R6M	3.6	±20%	7.40	6.90	4.90	4.30	22.5
NRSA6045-4R7M	4.7	±20%	6.80	6.20	4.50	4.00	26.0
NRSA6045-5R6M	5.6	±20%	6.40	5.70	4.10	3.70	31.0
NRSA6045-6R3M	6.3	±20%	5.90	5.30	3.80	3.50	33.0
NRSA6045-6R8M	6.8	±20%	5.70	5.15	3.60	3.30	34.0

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NRSA6045-8R2M	8.2	±20%	5.10	4.50	3.40	2.90	46.0
NRSA6045-100M	10	±20%	4.60	4.20	3.20	2.60	52.0
NRSA6045-150M	15	±20%	3.80	3.30	2.80	2.20	71.0
NRSA6045-180M	18	±20%	3.40	2.90	2.60	2.10	80.0
NRSA6045-220M	22	±20%	3.30	2.70	2.30	1.90	96.0
NRSA6045-330M	33	±20%	2.50	2.10	1.80	1.50	145
NRSA6045-470M	47	±20%	2.00	1.75	1.60	1.20	200
NRSA6045-560M	56	±20%	1.80	1.65	1.40	1.00	230
NRSA6045-680M	68	±20%	1.60	1.52	1.10	0.92	305
NRSA6045-820M	82	±20%	1.50	1.40	0.98	0.88	365
NRSA6045-101M	100	±20%	1.33	1.25	0.92	0.82	456
NRSA6045-121M	120	±20%	1.20	1.10	0.85	0.79	500
NRSA6045-181M	180	±20%	1.00	0.90	0.68	0.60	745
NRSA6045-221M	220	±20%	0.88	0.77	0.60	0.50	900

I<sub>R</sub> will cause the coil temperature rise approximately Δt40 °C

I<sub>SAT</sub> will cause L to drop approximately 30% .

### Typical Electrical Characteristics:

