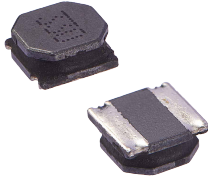


**NRSA Series**  
**SMD Power Inductors For Automotive**  
**Size 6028**



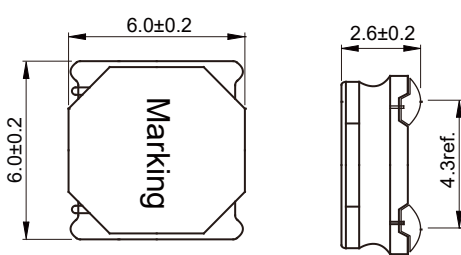
**FEATURES**

- 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)
- AEC-Q200 qualified
- Quantity: 2000pcs

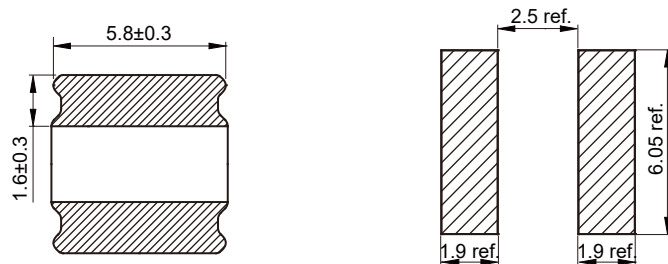
**APPLICATION**

- Car navigation, car stereo and car accessories only

Dimensions: [mm]



Land Pattern: [mm]



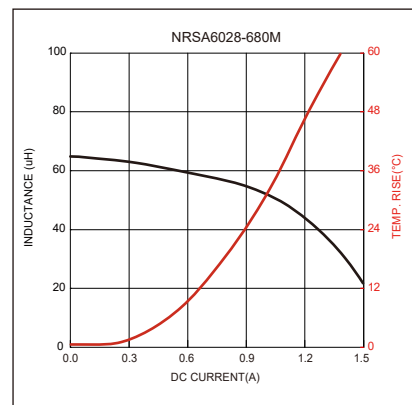
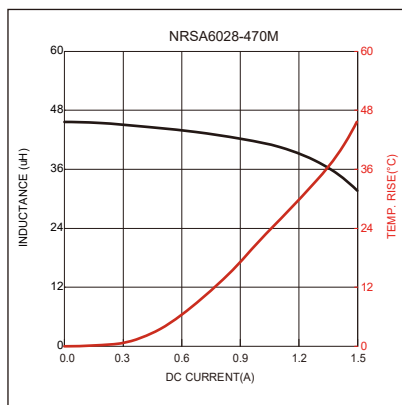
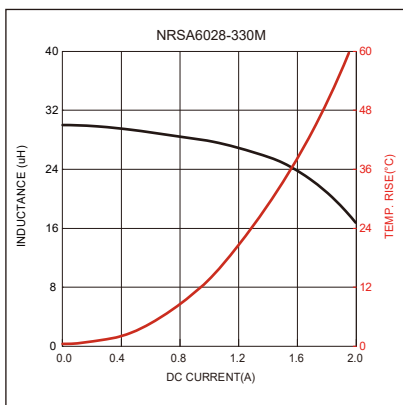
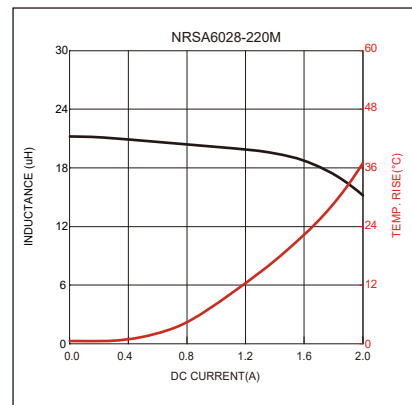
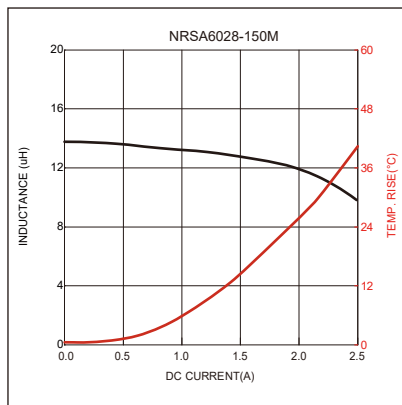
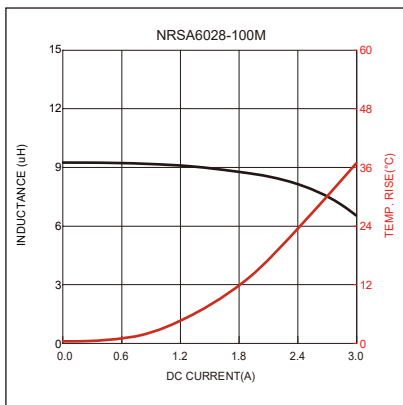
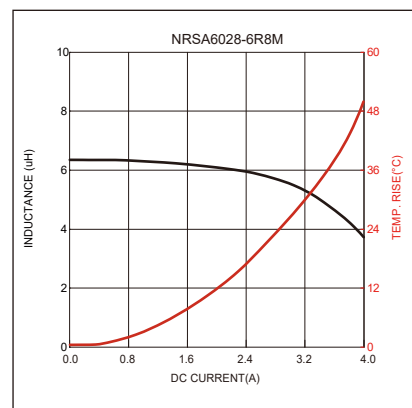
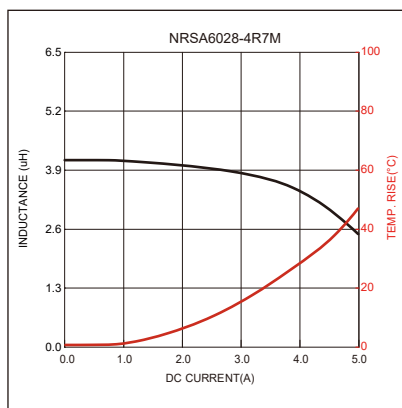
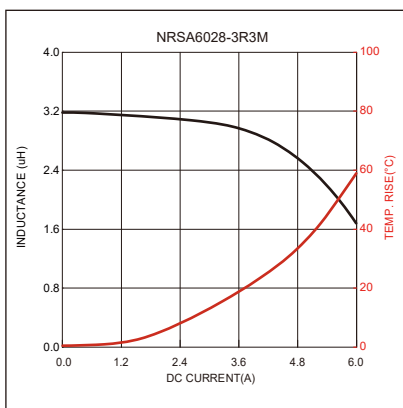
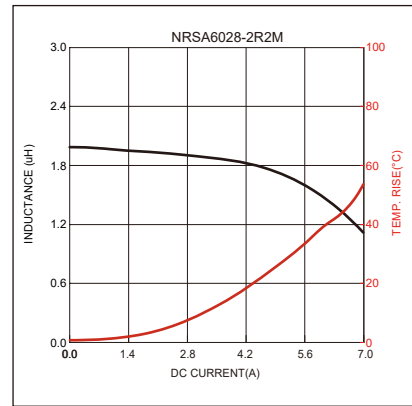
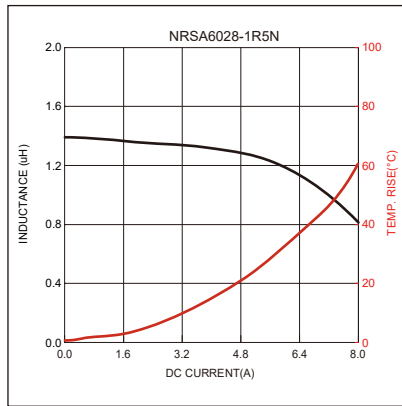
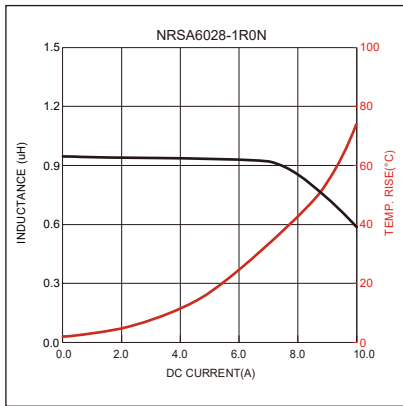
**Electrical Properties:**

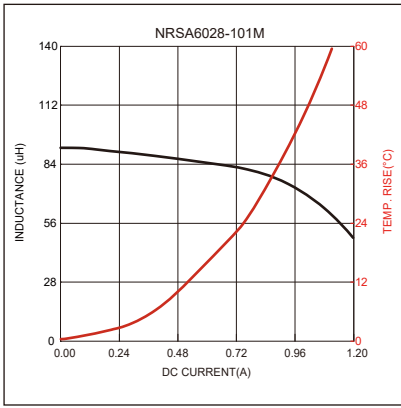
Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Saturation Current Typ. (A)	Temperature Rise Current Typ. (A)	R <sub>DC</sub> ±20% (mΩ)
NRSA6028-1R0N	1.0	±30%	5.75	5.20	10
NRSA6028-1R5N	1.5	±30%	5.30	4.95	14
NRSA6028-2R2M	2.2	±20%	5.00	4.50	18
NRSA6028-3R3M	3.3	±20%	4.30	3.60	24
NRSA6028-4R7M	4.7	±20%	3.20	3.10	30
NRSA6028-6R8M	6.8	±20%	2.85	2.50	47
NRSA6028-100M	10	±20%	2.10	2.00	65
NRSA6028-150M	15	±20%	2.00	1.80	98
NRSA6028-220M	22	±20%	1.60	1.50	138
NRSA6028-330M	33	±20%	1.40	1.30	200
NRSA6028-470M	47	±20%	1.15	1.06	280
NRSA6028-680M	68	±20%	1.00	0.81	420
NRSA6028-101M	100	±20%	0.80	0.72	605

Saturation Current will cause L to drop approximately 30%

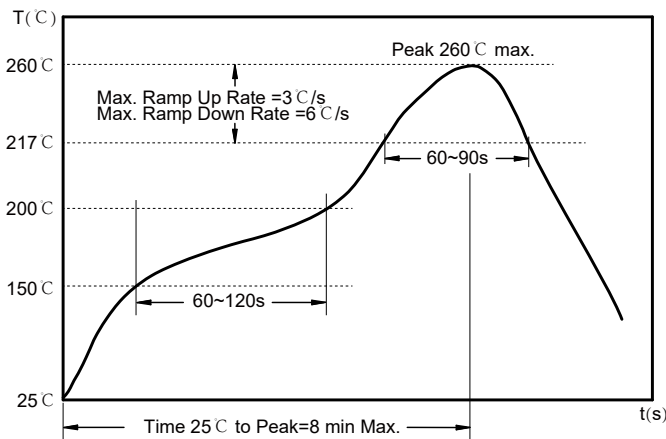
Temperature Rise Current: The actual value of DC current when the temperature rise is ΔT=40°C

Typical Electrical Characteristics:





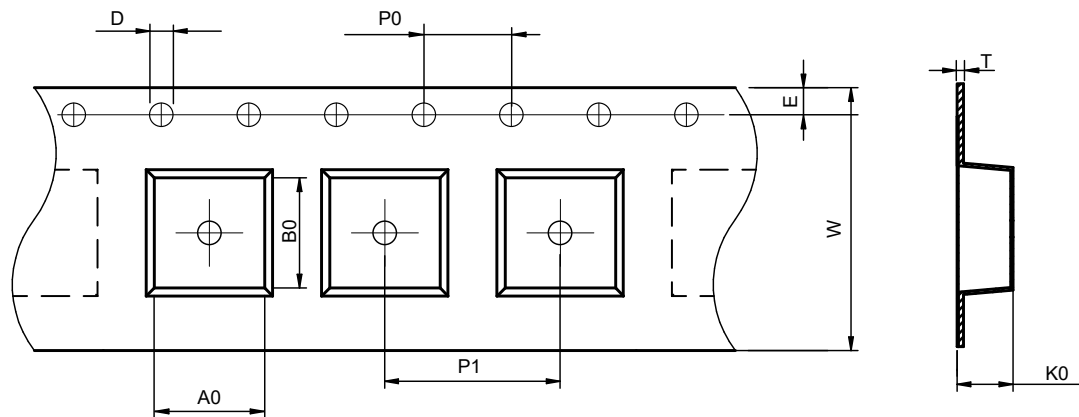
### Soldering Reflow:



Preheat condition: 150 ~200 °C / 60~120 sec.  
 Allowed time above 217 °C : 60~90 sec.  
 Max temperature: 260 °C .  
 Allowed Reflow time: 2x max.

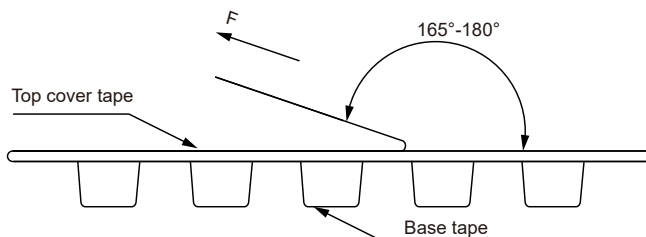
### Packaging Information:

#### Tape Dimension :



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
NRSA6028	6.4±0.1	6.4±0.1	1.5±0.1	4.0±0.1	8.0±0.1	16.0±0.3	3.3±0.1	1.75±0.1	0.40±0.03

#### Peel force of top cover tape:

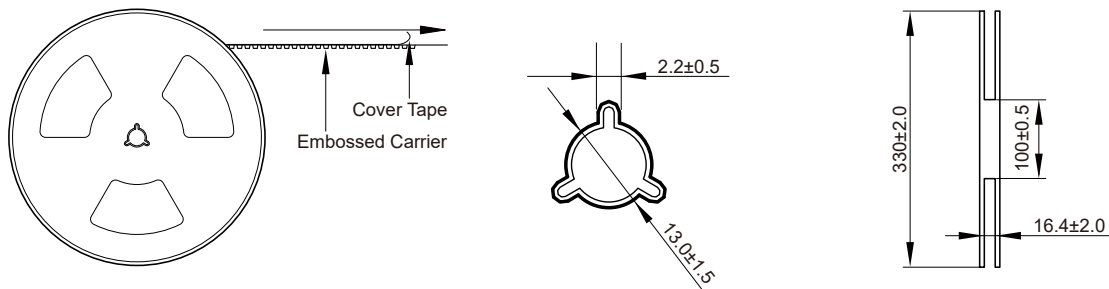


The peel force of top cover tape shall be between 0.3 to 1.17 N

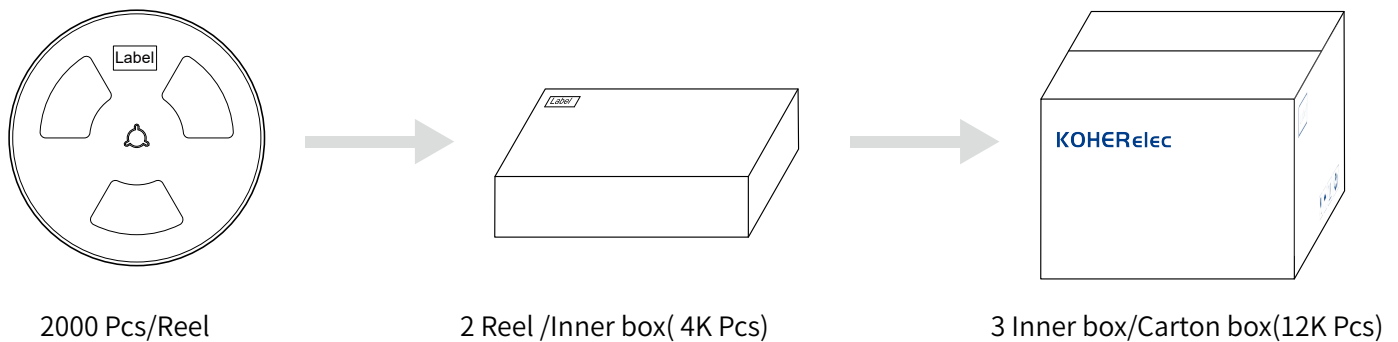
#### Product Marking:

Marking	Printing (Inductance)
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Reel Dimension: [mm]



Packaging Quantity:



Cautions and Warnings:

Storage Conditions :

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max).If the storage period elapses, the soldering of the terminal electrodes may deteriorate.The warranty period is one year.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

Operation Instructions:

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components.The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer does.As a result customer shall be responsible for checking and confirming whether Koher product with the performance described in the product specification is suitable for using in customer's particular application or not.