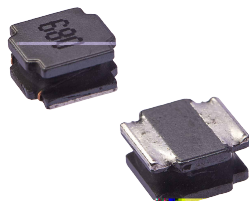


NRSA Series

SMD Power Inductors For Automotive

Size 8040



FEATURES

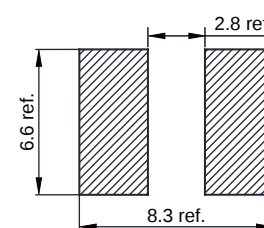
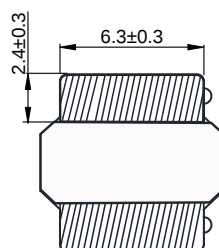
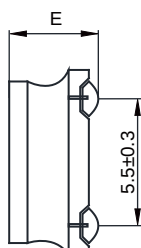
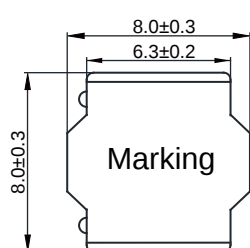
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APPLICATION

-

Dimensions: [mm]

Land Pattern: [mm]



Electrical Properties:

	(μ H)		Saturation (A)	Saturation (A)	(A)	(A)	(m Ω)	(MHZ)	
								92	
	2.2								
	3.3								
	4.7							23	
								23	
	22								
	33								
	47							7.3	

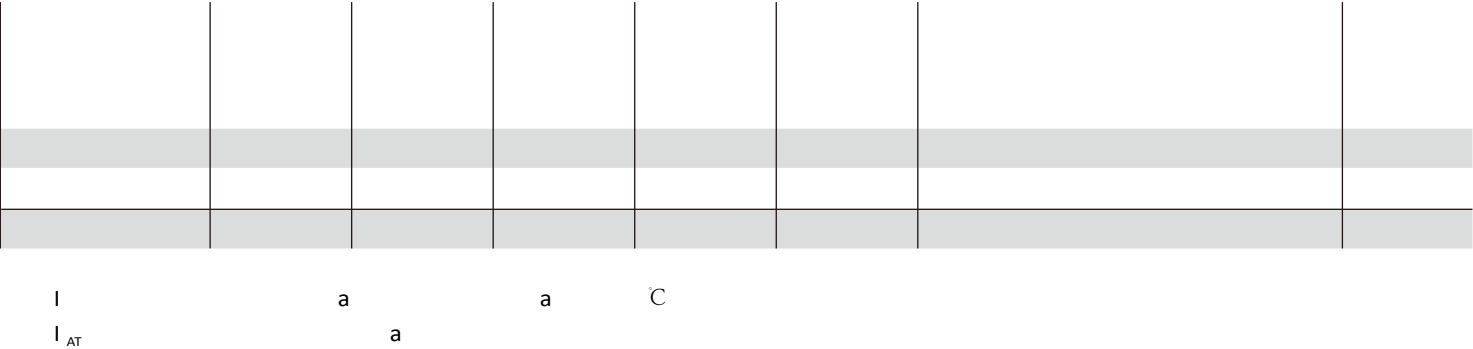
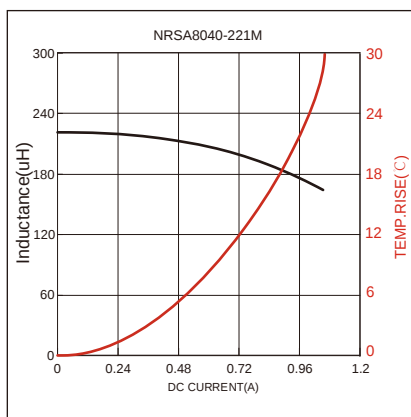
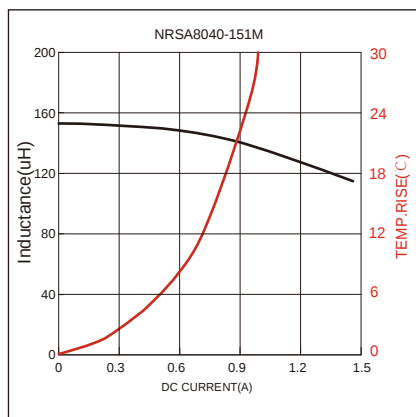
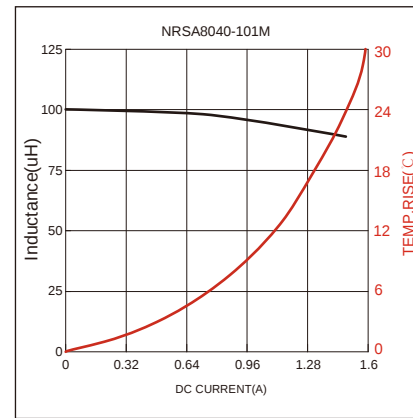
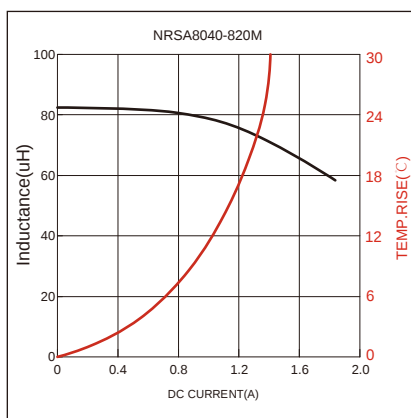
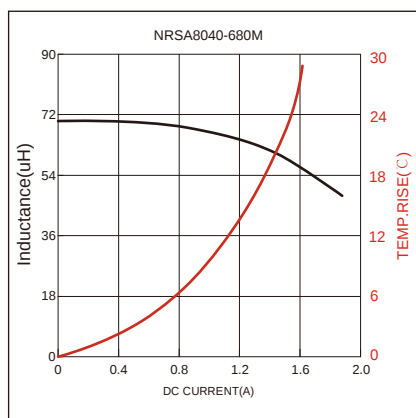
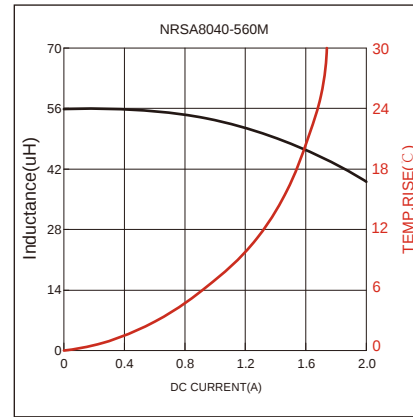
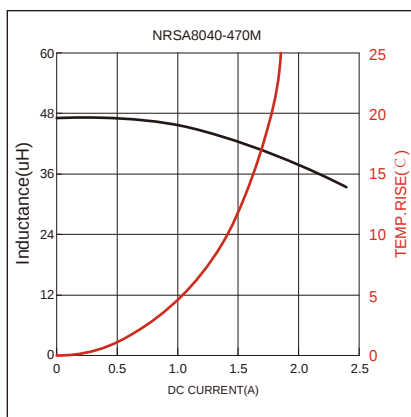
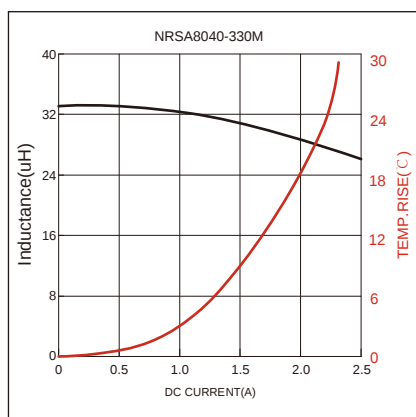
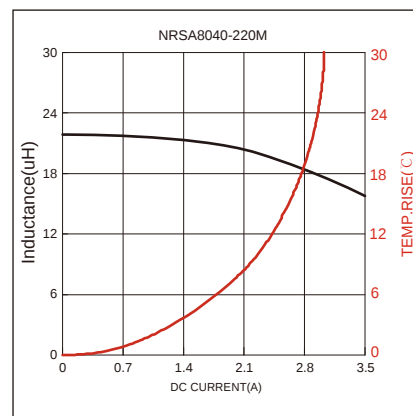
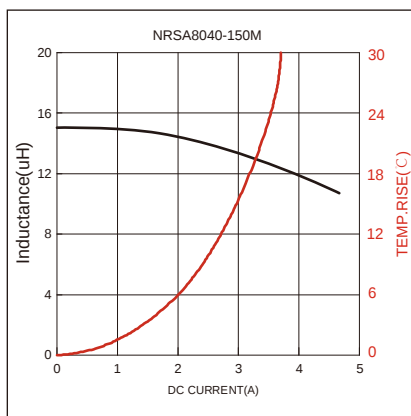
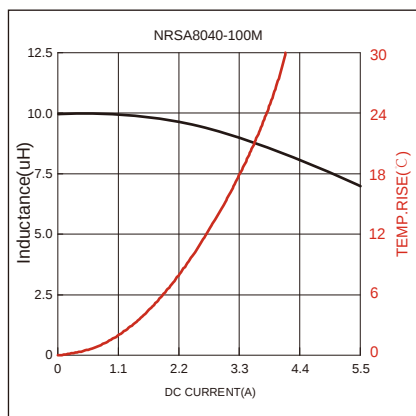


Figure 1 displays seven graphs showing the relationship between Inductance (uH) and Temperature Rise (°C) versus Current (A) for various NRS8040 inductor models. The graphs are arranged in a grid, with the last cell empty for the NRS8040-5R model.

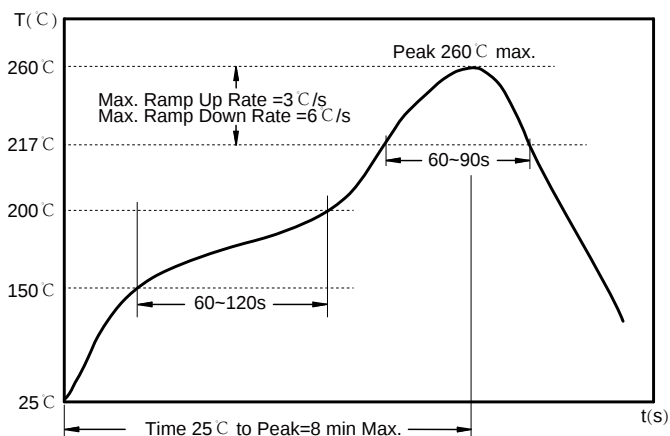
The graphs show that Inductance (uH) generally decreases as Current (A) increases, while Temperature Rise (°C) increases quadratically with Current (A). The temperature rise is indicated by a red line, and the inductance is indicated by a black line.

The graphs are labeled as follows:

- NRS8040-1R0M
- NRS8040-1R4M
- NRS8040-1R5M
- NRS8040-2R2M
- NRS8040-3R3M
- NRS8040-4R7M
- NRS8040-5R



Soldering Reflow:



Preheat condition: 150 ~200 °C / 60~120 sec.

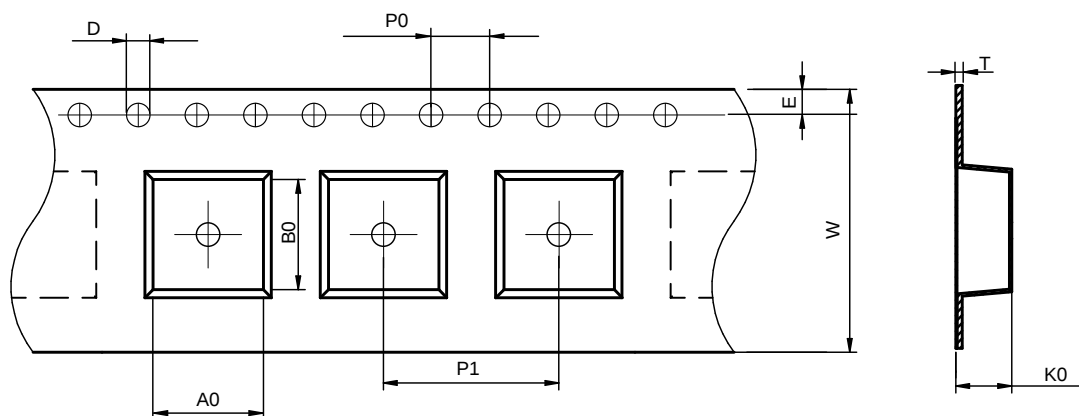
Allowed time above 217 °C : 60~90 sec.

Max temperature: 260 °C .

Allowed Reflow time: 2x max.

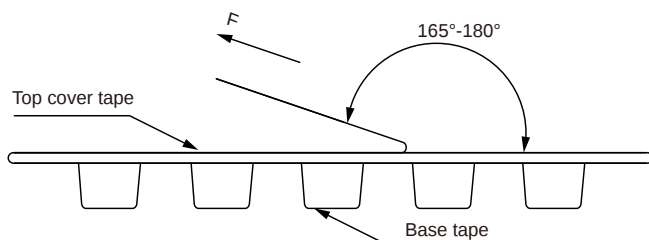
Packaging Information:

Tape Dimension :



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
NRSA8040	8.55±0.1	8.55±0.1	1.5±0.1	4.0±0.1	12.0±0.1	16.0±0.3	4.4±0.1	1.75±0.1	0.40±0.05

Peel force of top cover tape:

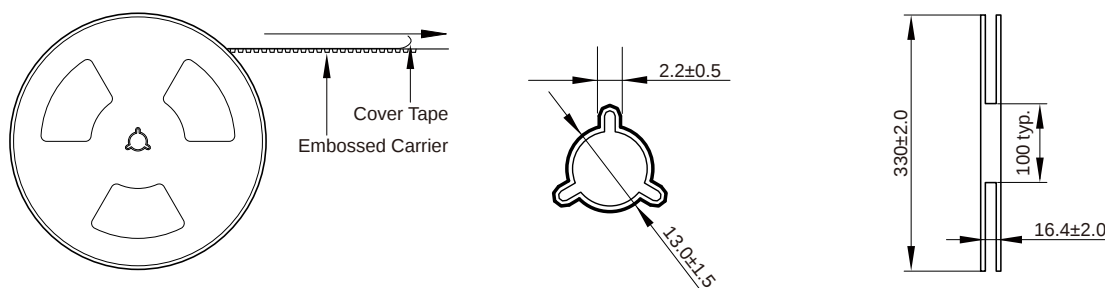


The peel force of top cover tape shall be between 0.3 to 1.17 N

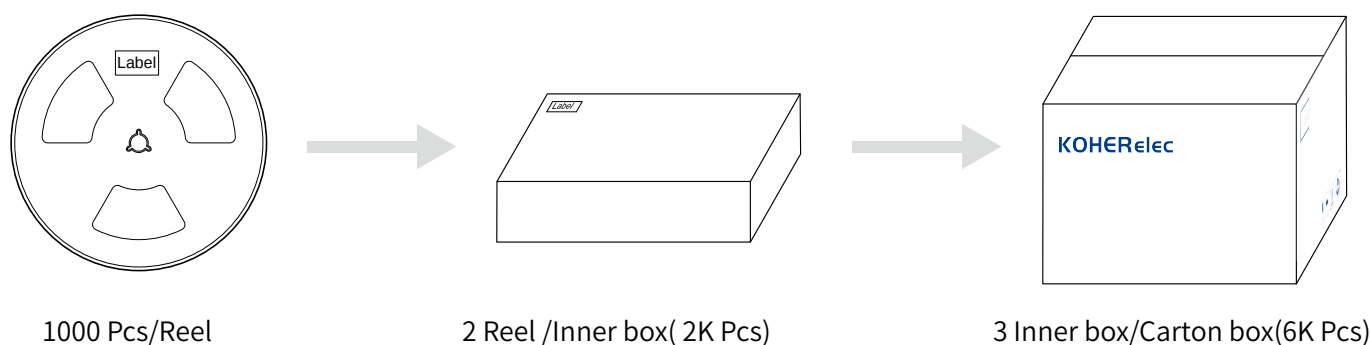
Product Marking:

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.