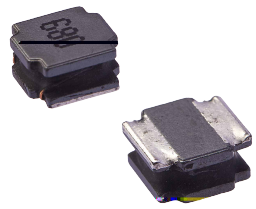
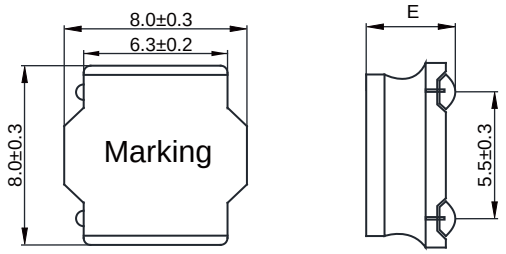
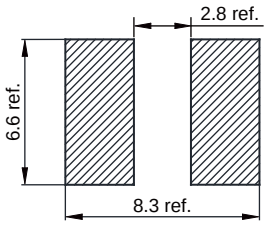
SMD Power Inductors For Automotive
Size 8040



Dimensions: [mm]



Land Pattern: [mm]



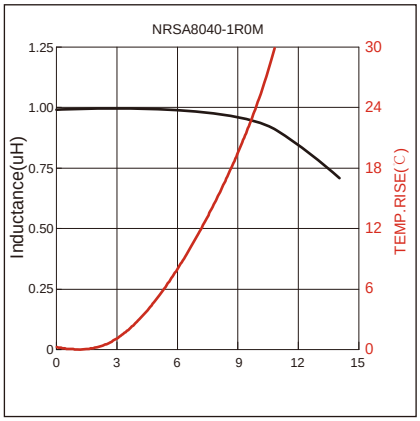
Electrical Properties:

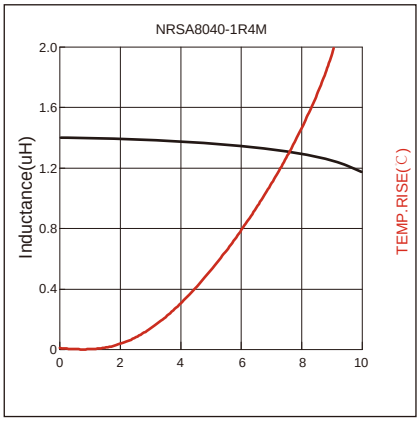
	(µH)		Saturation (A)	Saturation (A)	(A)	(A)	(mΩ)	(MHZ)	
								92	
	2.2								
	3.3								
	4.7							23	
								23	
	22								
	33								
	47							7.3	

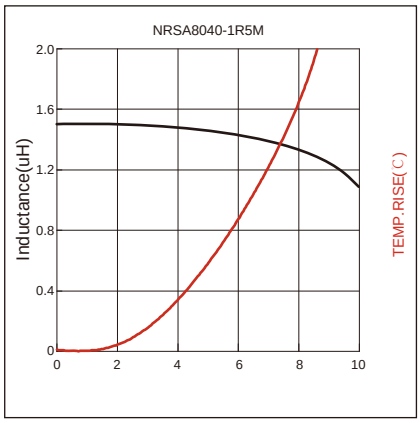
I a a °C

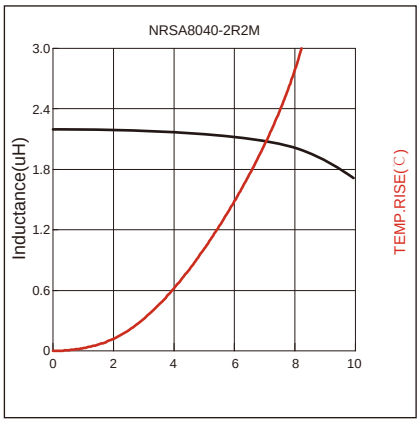
I_{AT} a

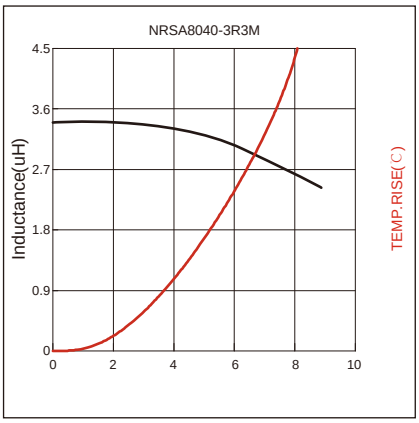
Typical Electrical Characteristics:

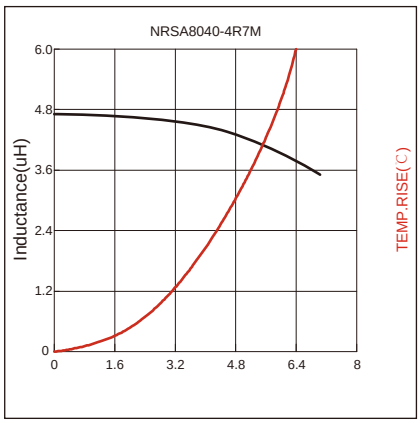




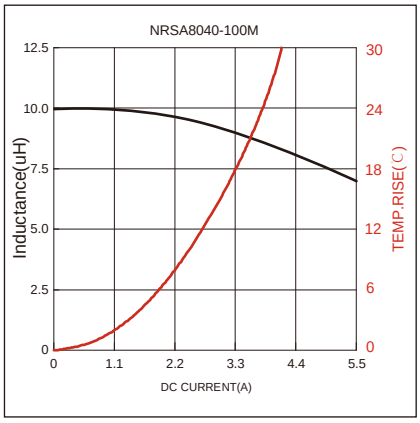


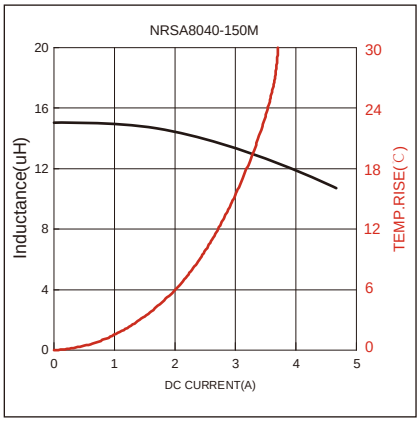


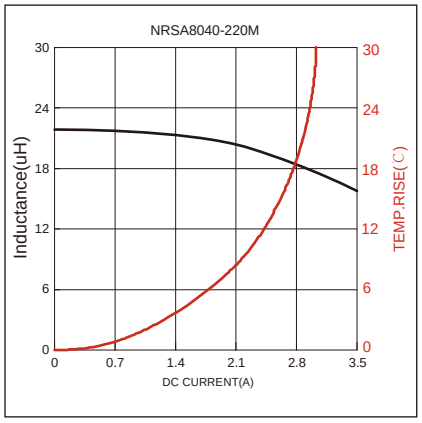


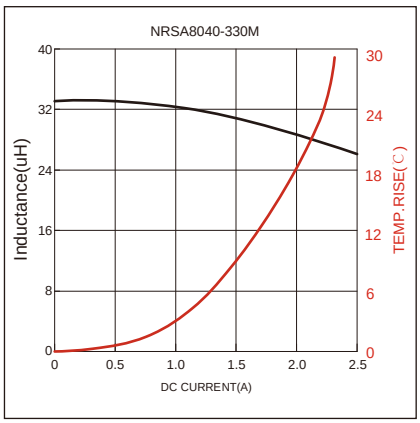


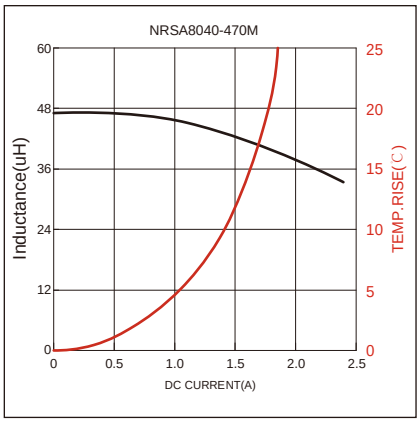


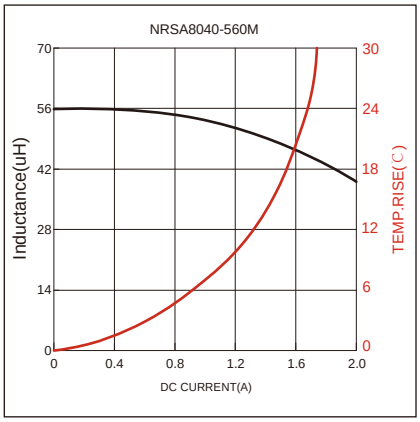

NRSA8040-100M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
12.5
10.0
7.5
5.0
2.5
0
30
24
18
12
6
0
0
1.1
2.2
3.3
4.4
5.5

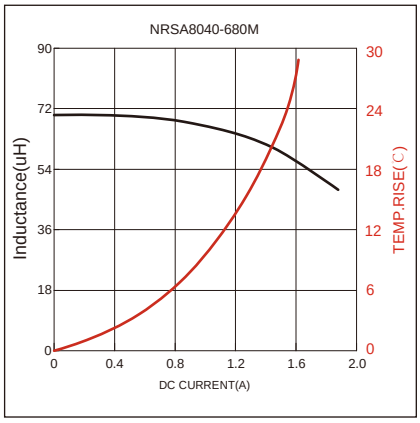

NRSA8040-150M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
20
16
12
8
4
0
30
24
18
12
6
0
0
1
2
3
4
5

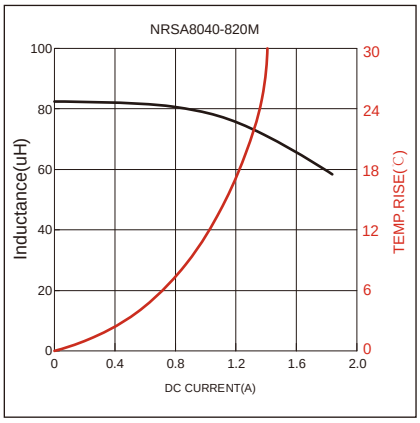

NRSA8040-220M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
30
24
18
12
6
0
30
24
18
12
6
0
0
0.7
1.4
2.1
2.8
3.5

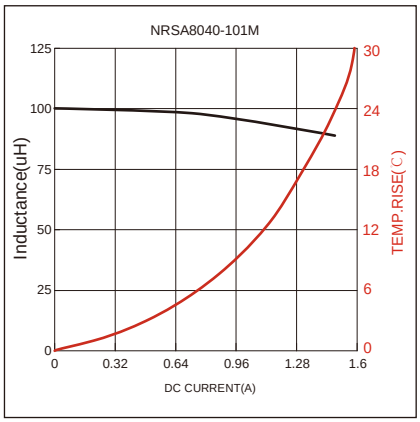

NRSA8040-330M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
40
32
24
16
8
0
30
24
18
12
6
0
0
0.5
1.0
1.5
2.0
2.5

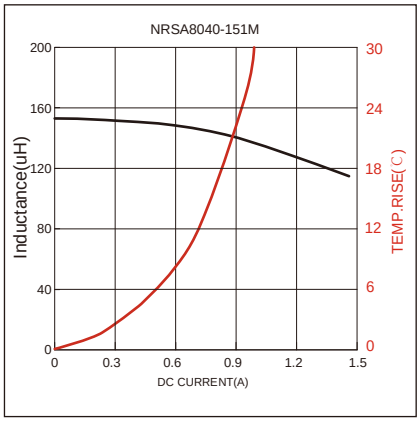

NRSA8040-470M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
60
48
36
24
12
0
25
20
15
10
5
0
0
0.5
1.0
1.5
2.0
2.5

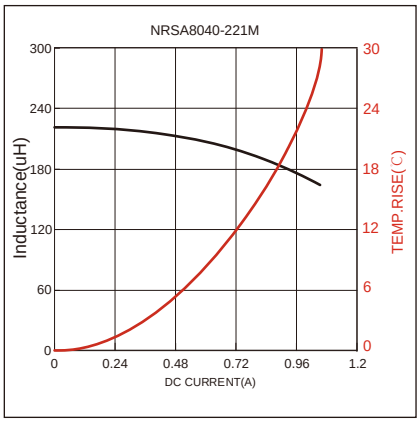

NRSA8040-560M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
70
56
42
28
14
0
30
24
18
12
6
0
0
0.4
0.8
1.2
1.6
2.0


NRSA8040-680M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
90
72
54
36
18
0
30
24
18
12
6
0
0
0.4
0.8
1.2
1.6
2.0

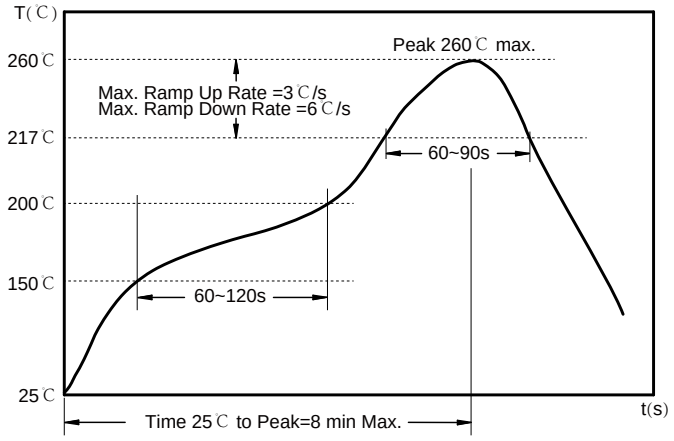

NRSA8040-820M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
100
80
60
40
20
0
30
24
18
12
6
0
0
0.4
0.8
1.2
1.6
2.0


NRSA8040-101M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
125
100
75
50
25
0
30
24
18
12
6
0
0
0.32
0.64
0.96
1.28
1.6


NRSA8040-151M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
200
160
120
80
40
0
30
24
18
12
6
0
0
0.3
0.6
0.9
1.2
1.5


NRSA8040-221M
Inductance(uH)
TEMP.RISE(℃)
DC CURRENT(A)
300
240
180
120
60
0
30
24
18
12
6
0
0
0.24
0.48
0.72
0.96
1.2

Soldering Reflow:



Preheat condition: 150 ~200℃/ 60~120 sec.

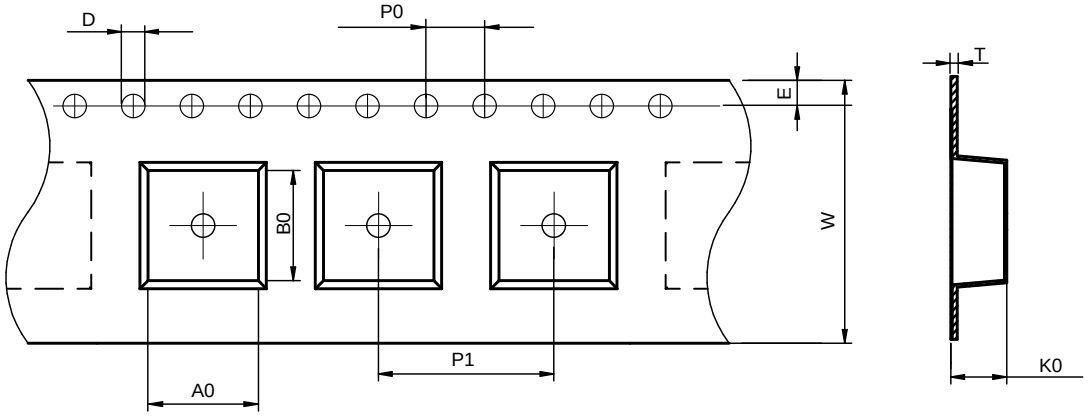
Allowed time above 217℃: 60~90 sec.

Max temperature: 260℃.

Allowed Reflow time: 2x max.

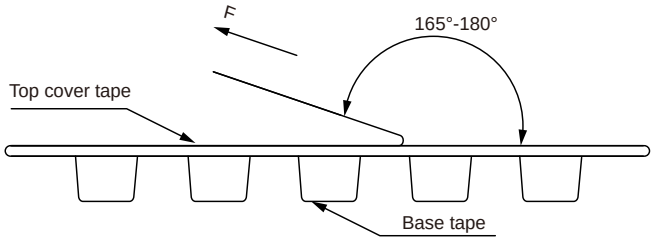
Packaging Information:

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:

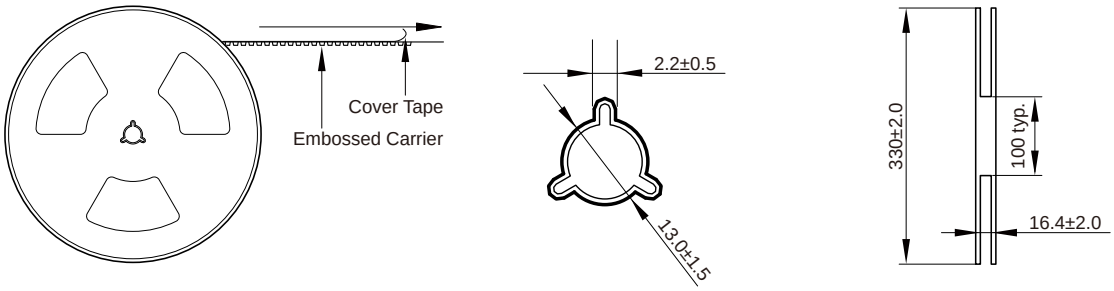


The peel force of top cover tape shall be between 0.3 to 1.17 N

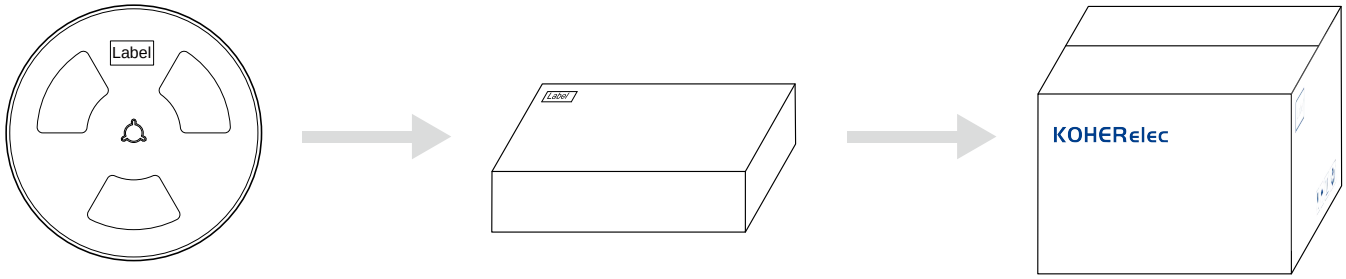
Product Marking:

Marking	Printing (Inductance)

Reel Dimension：[mm]



Packaging Quantity:



1000 Pcs/Reel

2 Reel /Inner box(2K Pcs)

3 Inner box/Carton box(6K Pcs)

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.