

Power Choke

JSHC1054 Series

Automotive-Grade A0

JinLai's proven design and process support high reliability, high thermal characteristics, and high efficiency power chokes for automotive application.

DATA SHEET

Production address: Chongqing

变更履历 Revision History

版本号 Revision	变更日期 Changed Date	申请者 Request By	变更内容 Change Content
A0	2019/4/6	孙春香	正式承认 发行

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1.Features

Products are lead-free, in line with RoHS directive, Halogen Free and REACH Compliance

High performance (Isat) realized by metal dust core

Lowest DCR impedance of the same size

Capable of corresponding high frequency

The integrated structure avoids noise

AEC-Q200 qualified

2.Application

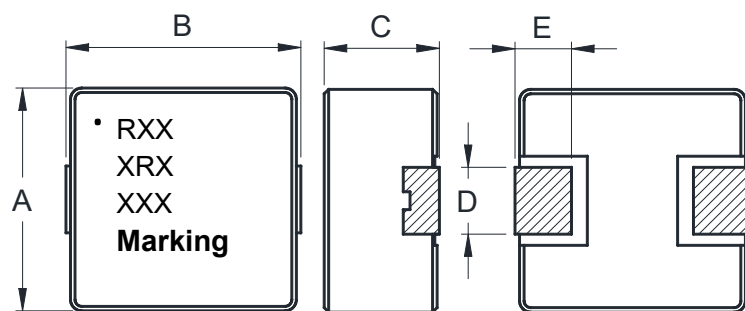
Automotive applications

3.Part No. definition

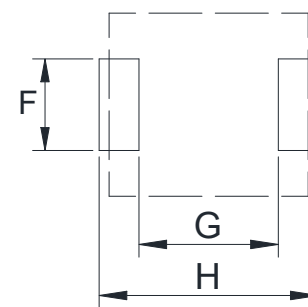
JSHC **1054** **H** - **XXX** **M** - **K** - **A** **5**
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① 产品代码 : JSHC Series ⑤ 公差范围 : M = ±20%
Product Code Tolerance
② 产品尺寸 : 10.6×11.6×5.4mm ⑥ 粉料 : Alloy powders
Dimension Powder lot
③ 生产模具 : Regular size ⑦ 车载 : Automotive electronics
Production molds Vehicle products
④ 电感值 : 如 6R8=6.8μH ⑧ 工作温度 : -55°C ~ +155°C
Inductance Operating temperature
※ 工作温度范围: -55°C ~ +155°C (包含产品发热)
Operating temperature range : -55°C ~ +155°C (Including self-temperature rise)

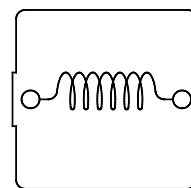
4.Appearance and dimensions



Reference PCB pattern



Schematic



Dimensions in mm

A	B	C	D	E	F	G	H
10.6Max	11.6Max	5.4Max	3.0±0.5	2.0±0.5	4.8Ref	5.0Ref	12.0Ref

5. Electrical Characteristics

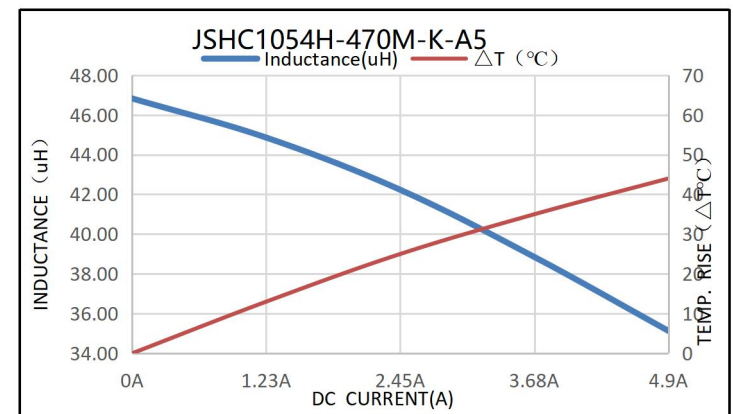
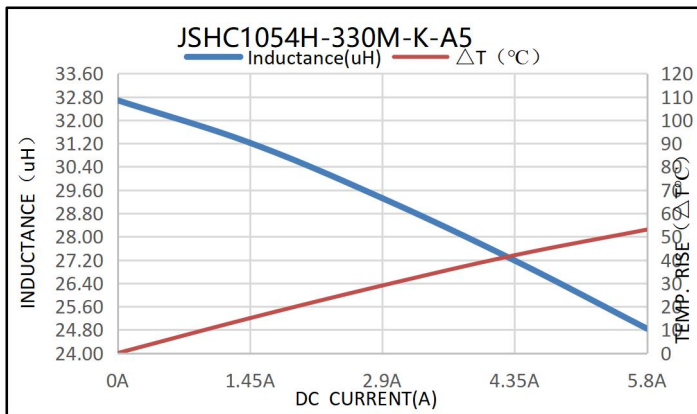
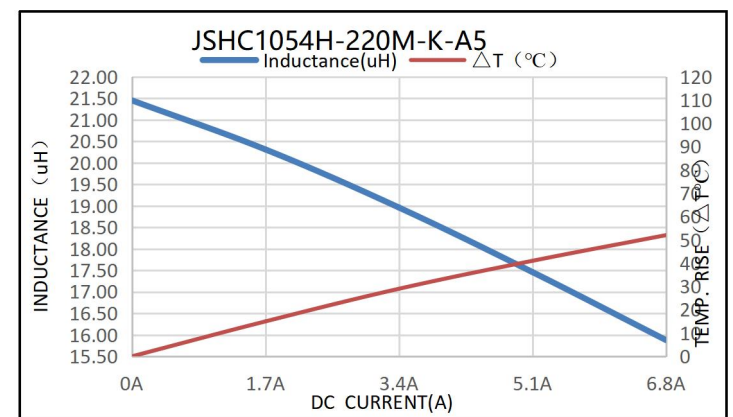
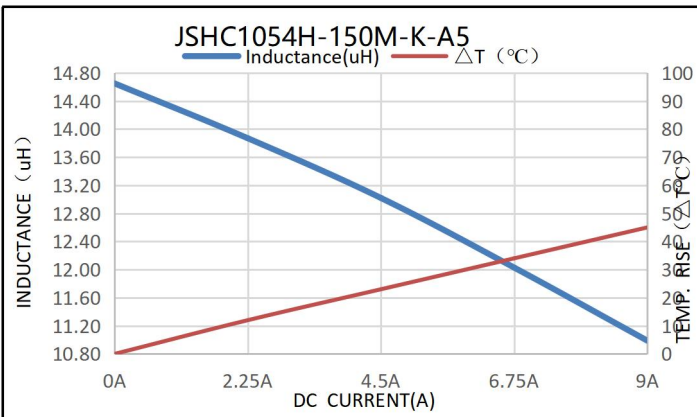
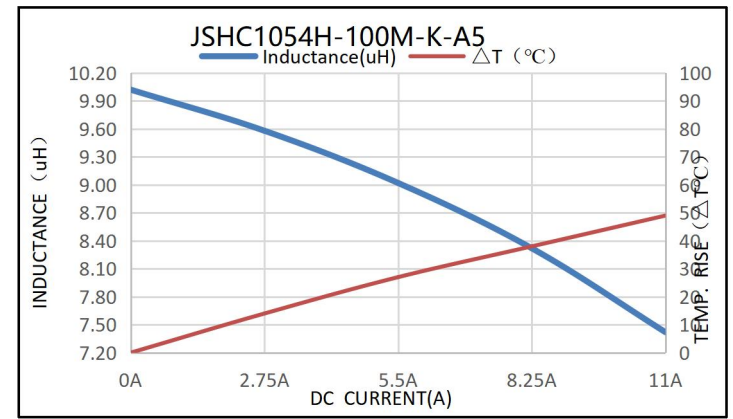
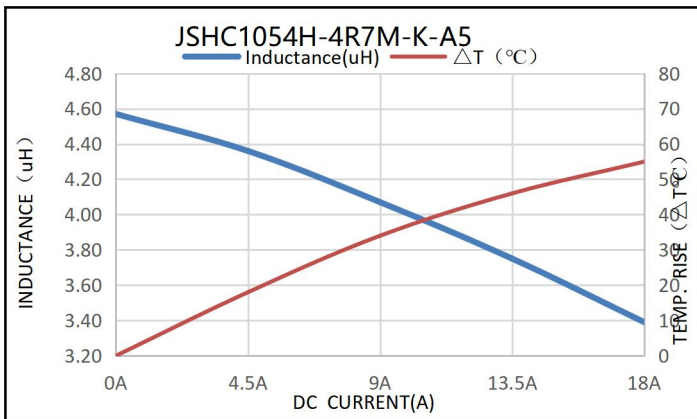
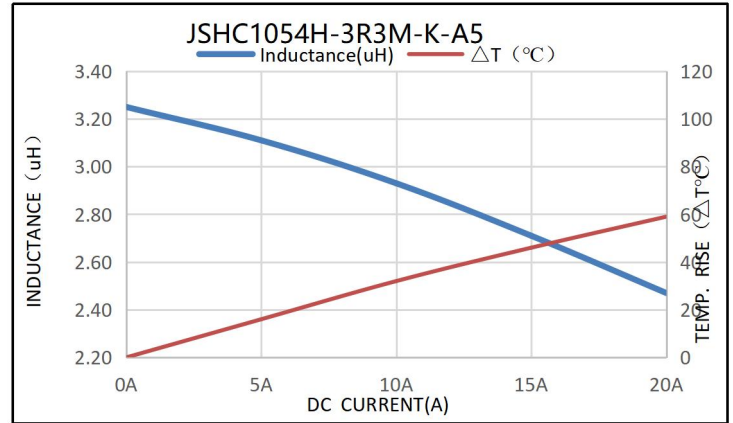
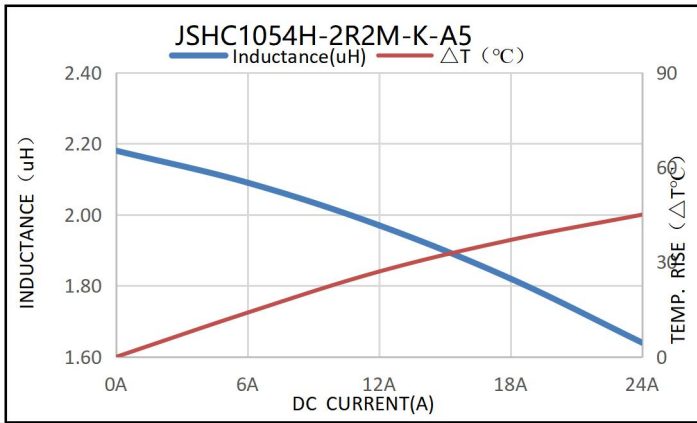
Part Number	Inductance	Tolerance	RDC(mΩ)		Isat(A)		Irms(A)	
	(uH)	(±%)	Typical	Max	Typical	Max	Typical	Max
JSHC1054H-2R2M-K-A5	2.2	20	4.7	5.2	24.0	21.6	22.0	19.8
JSHC1054H-3R3M-K-A5	3.3	20	7.2	8.0	20.0	18.0	12.6	11.3
JSHC1054H-4R7M-K-A5	4.7	20	12.0	13.5	18.0	16.2	11.2	10.1
JSHC1054H-100M-K-A5	10.0	20	23.0	28.0	11.0	9.9	8.5	7.6
JSHC1054H-150M-K-A5	15.0	20	34.0	39.5	9.0	8.1	7.2	6.5
JSHC1054H-220M-K-A5	22.0	20	46.8	52.0	6.8	6.1	5.0	4.5
JSHC1054H-330M-K-A5	33.0	20	67.5	75.0	5.8	5.2	4.4	4.0
JSHC1054H-470M-K-A5	47.0	20	96.0	107.8	4.9	4.4	4.2	3.8
JSHC1054H-680M-K-A5	68.0	20	167.4	186.0	3.5	3.2	2.3	2.1

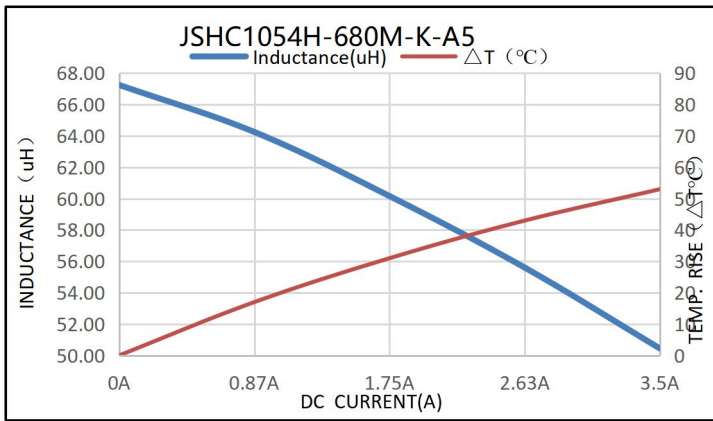
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- All data is tested on 25°C ambient temperature.
- Inductance is tested at 100kHz, 1.0V.
- Heat rating current: The value of DC current when product temperature rise is $\Delta T40^{\circ}\text{C}$ ($T_a=25^{\circ}\text{C}$).
- Saturation current: The value of DC current when the inductance decreases approximately 30% of its.

Special remind: Circuit design, component placement, frequency, cooling system and etc.
all will affect the product temperature. Please verify the actual product temperature in the final application.

6.Heat rating current VS saturation current curv

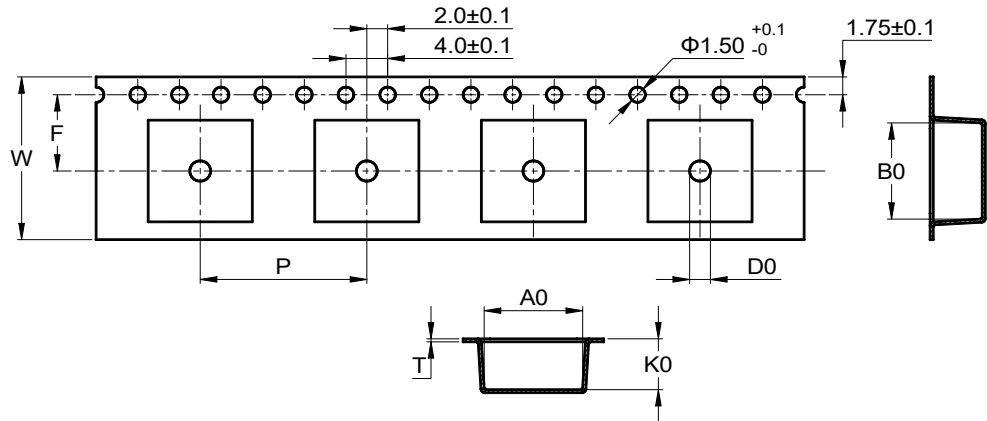




7.Packaging Specifications

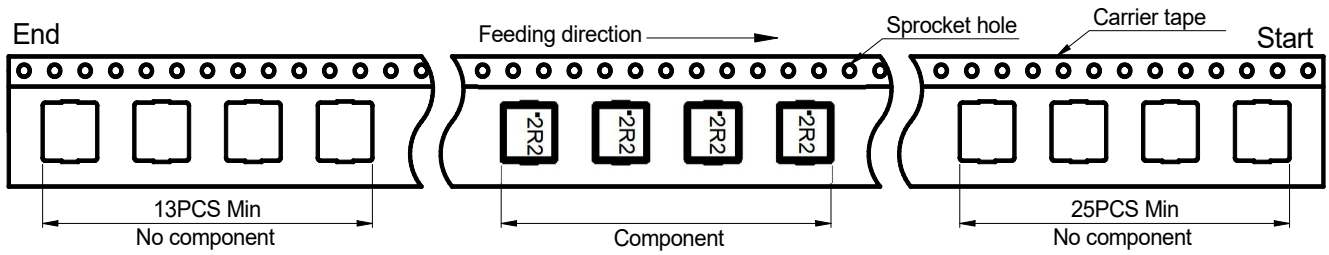
Carrier tape dimensions

A0	10.6±0.2
B0	10.65±0.2
K0	5.8±0.15
W	24.0±0.3
P	16.0±0.1
F	11.5±0.1
T	0.40±0.05
D0	1.5±0.10



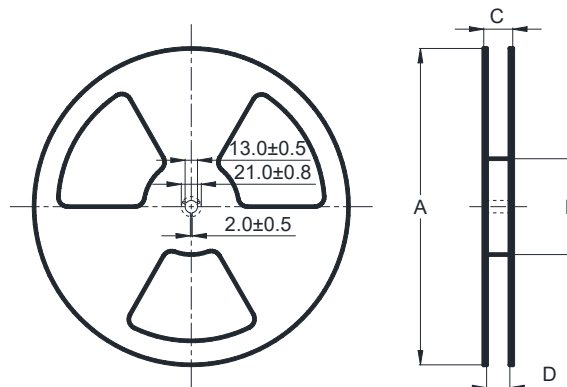
※ 包装参照国际标准 IEC 60286-3。
Packaging is referred to the international standard IEC 60286-3.

Packaging direction

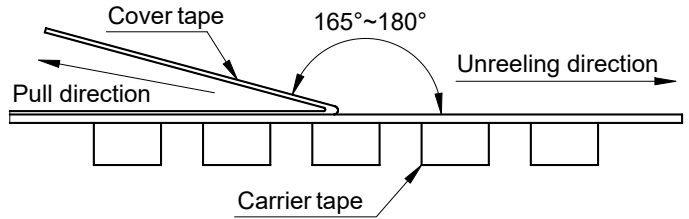
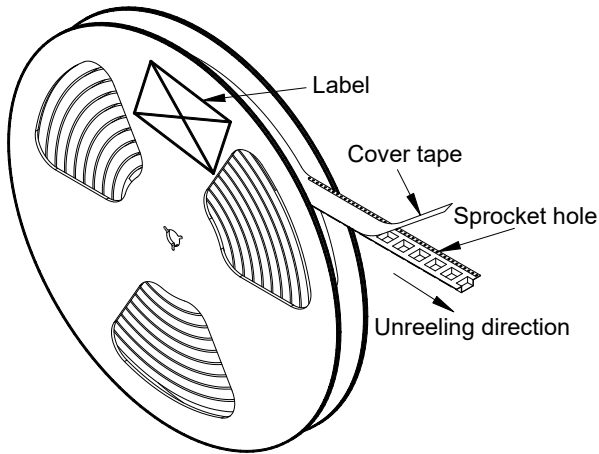


Reel dimensions

A	330 ± 2.0
B	100 Min
C	28.0 Max
D	24.5 Min

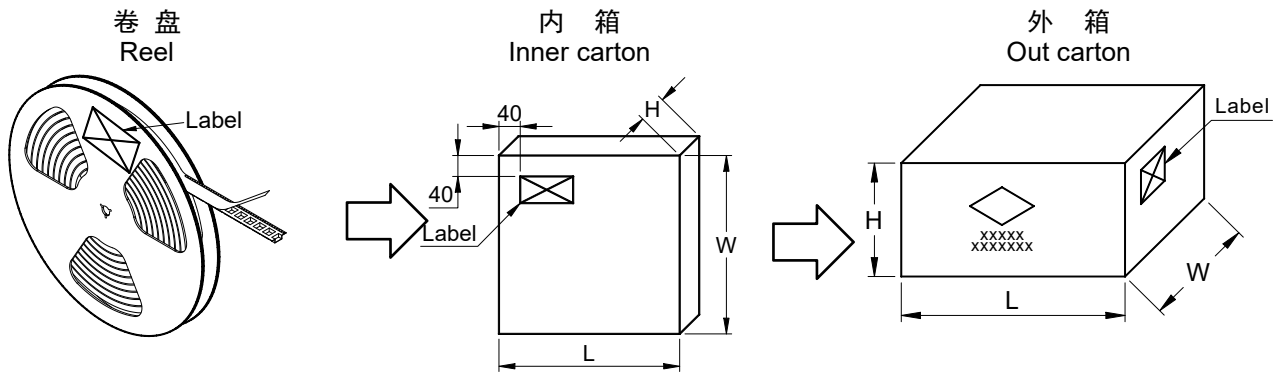


Cover tape peel-off condition



※ 盖带剥离力度为 0.1~1.3N。
Cover tape peel-off force will be 0.1 to 1.3N.
※ 参考剥离速度 300±10mm/分钟。
Reference peel-off speed 300±10mm/min.

Carton dimensions and packaging quantity



■ 内包装箱(L×W×H): 340×340×66mm
Inner Carton

■ 外包装箱(L×W×H): 360×360×215mm
Out Carton

SHC1054	每盘 包装数量 Per Reel Quantity	内箱 包装数量 Inner Carton Quatity	外箱 包装数量 Out Carton Quatity
	500 pcs	(500×2) = 1,000 pcs	(1,000×3) = 3,000 pcs