

Power Choke

JSHC0420 Series

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

DATA SHEET

Place of origin: 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	2025-9-30	田宁丽	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

2.Application

- DC/DC converter
- Smart phone/PAD,HDD/SSD,DVC/DSC
- Mobile display panels, portable game devices, compact power supply modules,other.

3.Part No. definition

JSHC	0420	H	-	XXX	M	-	K
①	②	③		④	⑤		⑥

- ① 产品代码
Product Code

:

JSHC Series

⑤ 公差范围
Tolerance

:

M = ±20%
- ② 产品尺寸
Dimension

:

4.5×4.9×2.0mm

⑥ 粉料
Powder lot

:

Alloy powders
- ③ 生产模具
Production molds

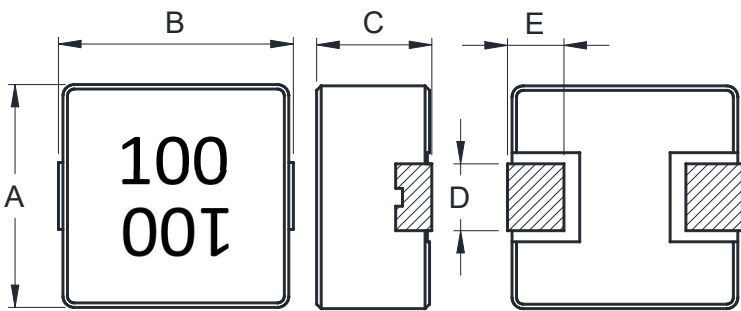
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Regular size
- ④ 电感值
Inductance

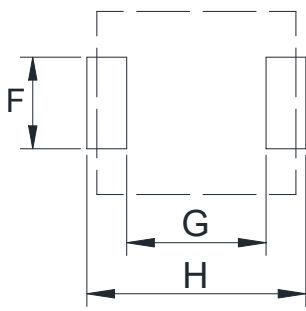
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如 6R8=6.8μH
- ※ 工作温度范围: -55℃ ~ +165℃ (包含产品发热)
Operating temperature range : -55℃ ~ +165℃ (Including self-temperature rise)

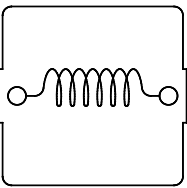
4.Appearance and dimensions



Reference PCB pattern



Schematic



A	B	C	D	E	F	G	H
4.5Max	4.9Max	2.0Max	1.5±0.5	1.0±0.3	2.5Ref	1.8Ref	4.8Ref

Dimensions in mm

5. Electrical Characteristics

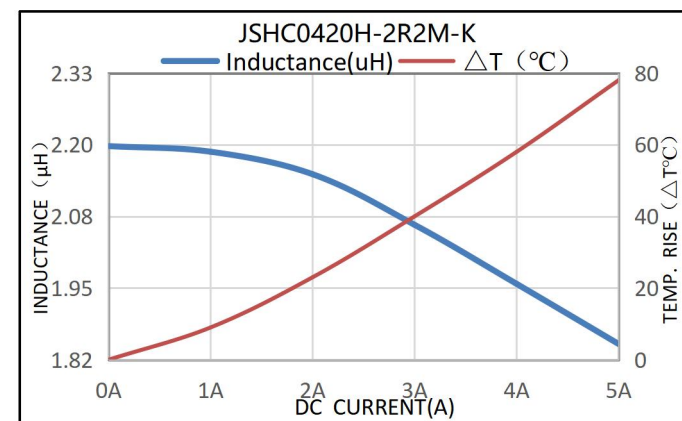
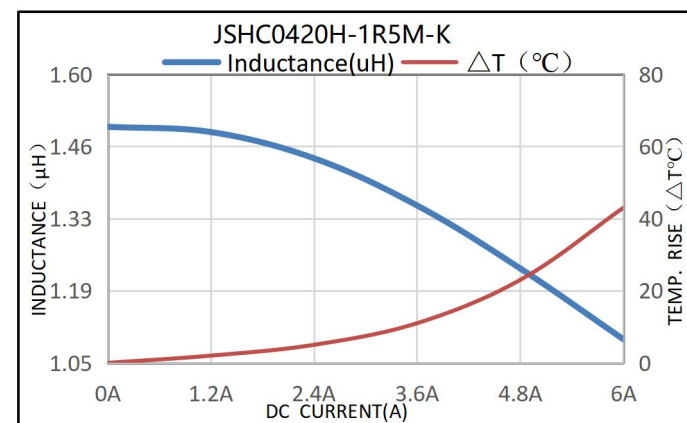
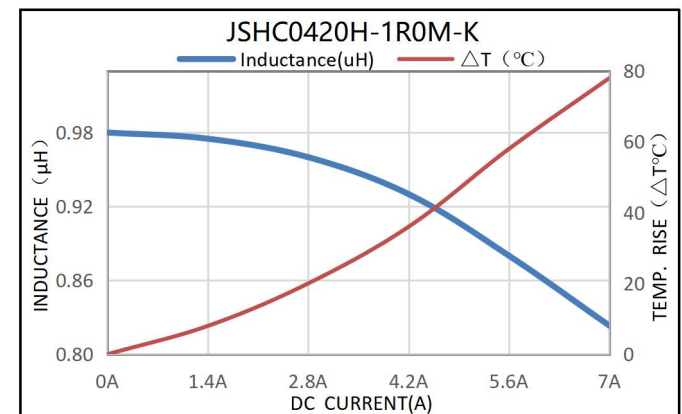
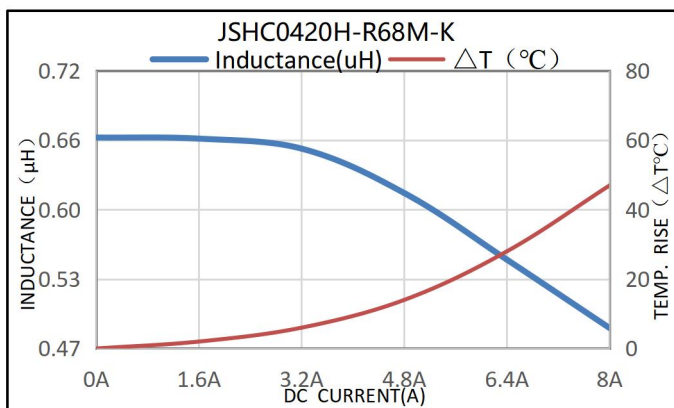
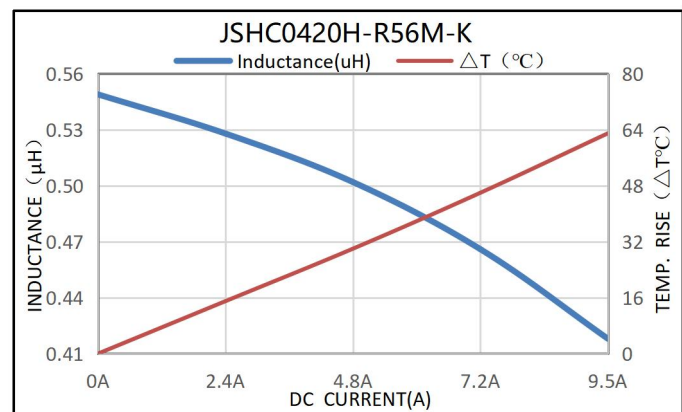
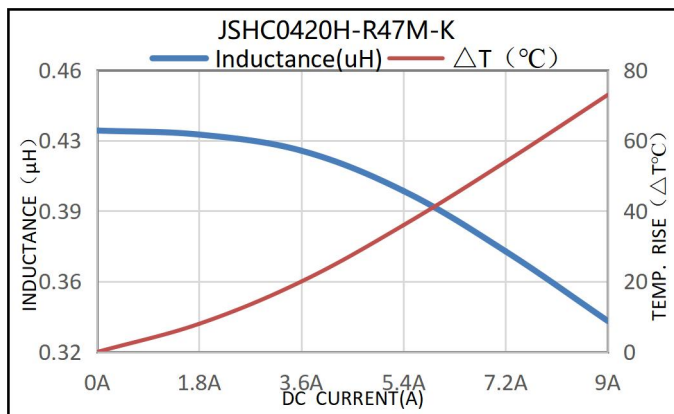
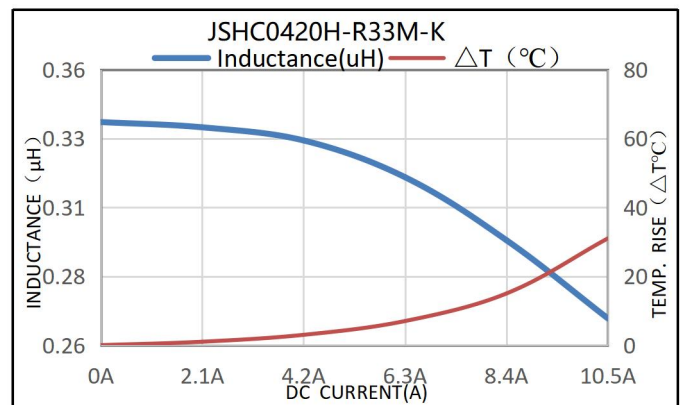
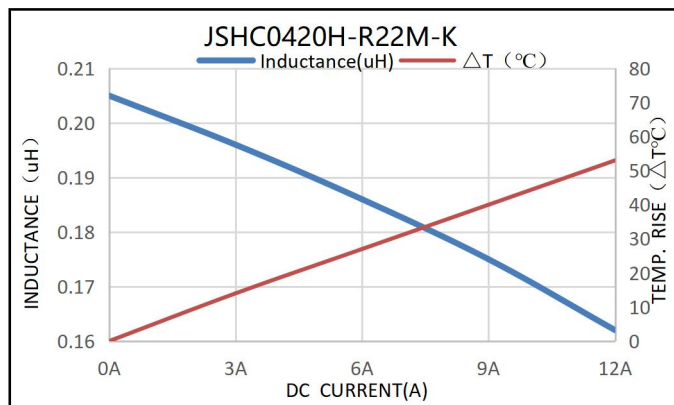
Part Number	Inductance	Tolerance	RDC(mΩ)		Isat(A)		Irms(A)	
	(uH)	(±%)	Typical	Max	Typical	Max	Typical	Max
JSHC0420H-R22M-K	0.22	20	7.2	8	12.0	10.8	9.0	8.1
JSHC0420H-R33M-K	0.33	20	10.8	12	10.5	9.45	8.0	7.2
JSHC0420H-R47M-K	0.47	20	12.6	14	9.0	8.1	5.5	4.95
JSHC0420H-R56M-K	0.56	20	16.2	18	9.5	8.55	5.2	4.68
JSHC0420H-R68M-K	0.68	20	18.9	21	8.0	7.2	5.0	4.5
JSHC0420H-1R0M-K	1.0	20	24.3	27	7.0	6.3	4.5	4.05
JSHC0420H-1R5M-K	1.5	20	32.4	36	6.0	5.4	4.0	3.6
JSHC0420H-2R2M-K	2.2	20	52.2	58	5.0	4.5	3.0	2.7
JSHC0420H-3R3M-K	3.3	20	81	90	3.0	2.7	2.0	1.8
JSHC0420H-4R7M-K	4.7	20	135	150	3.0	2.7	2.0	1.8
JSHC0420H-5R6M-K	5.6	20	144	160	2.6	2.34	2.0	1.8
JSHC0420H-6R8M-K	6.8	20	153	170	2.5	2.25	2.0	1.8
JSHC0420H-100M-K	100	20	180	200	2.0	1.8	1.5	1.8

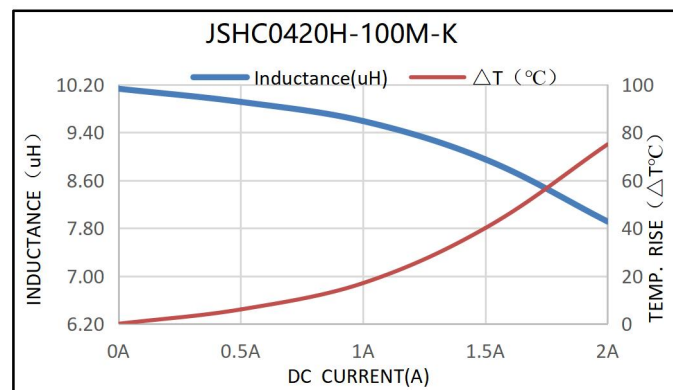
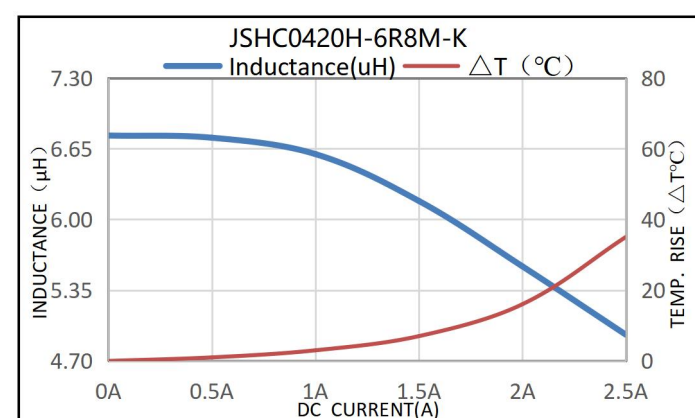
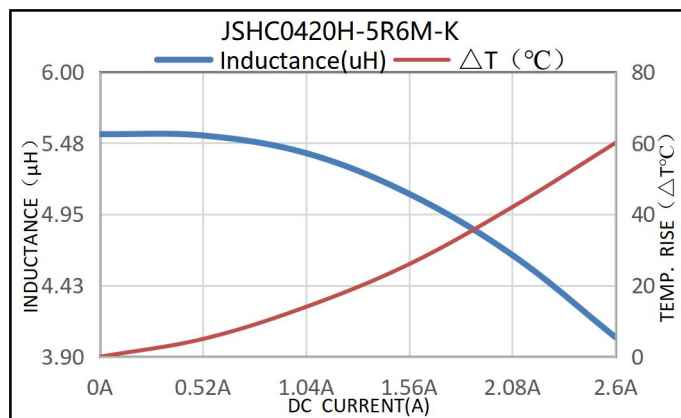
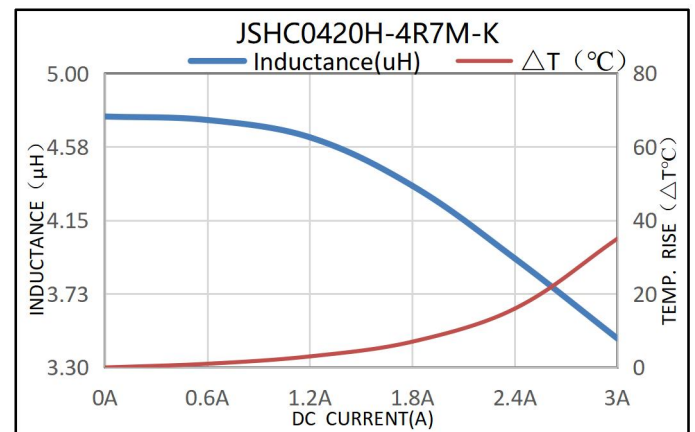
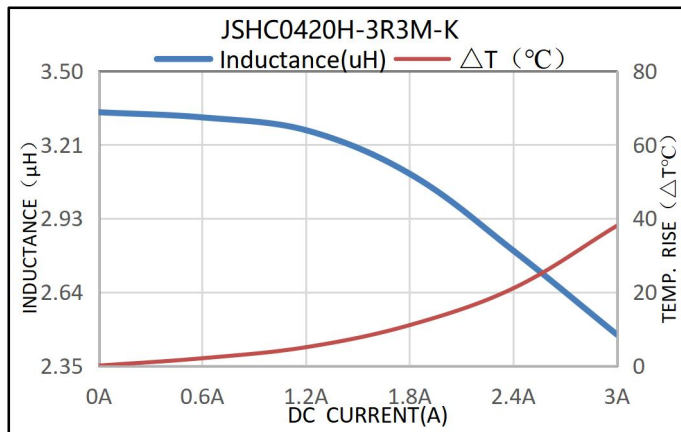
Note: When ordering, please specify tolerance code. Tolerance: M=±20%

- All data is tested on 25℃ 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

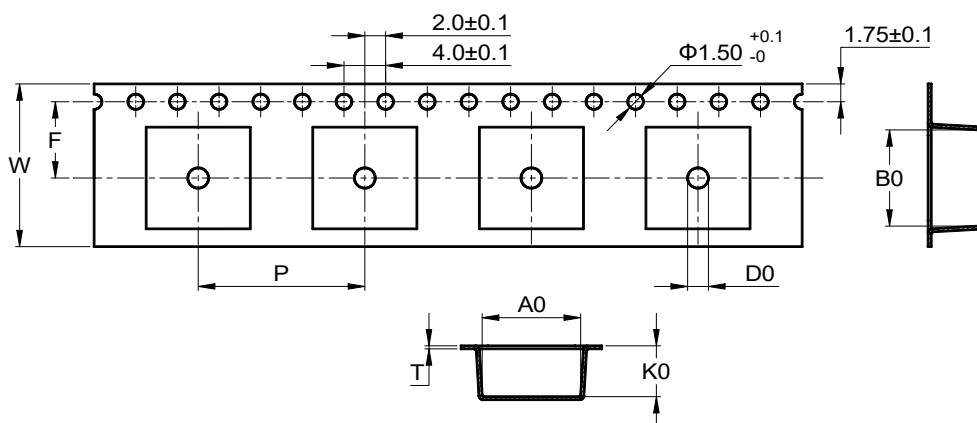




7. Packaging Specifications

Carrier tape dimensions

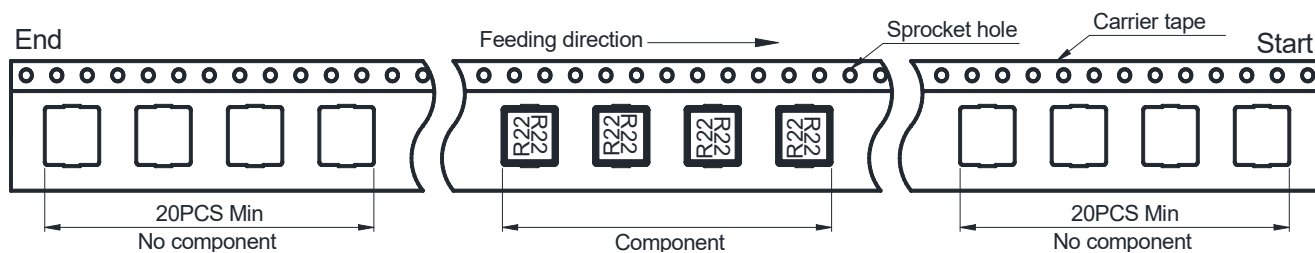
A0	4.35 ± 0.2
B0	4.90 ± 0.2
K0	2.25 ± 0.20
W	12.0 ± 0.3
P	8.0 ± 0.2
F	5.50 ± 0.1
T	0.35 ± 0.05
D0	1.5 ± 0.10



※ 包装参照国际标准 IEC 60286-3。

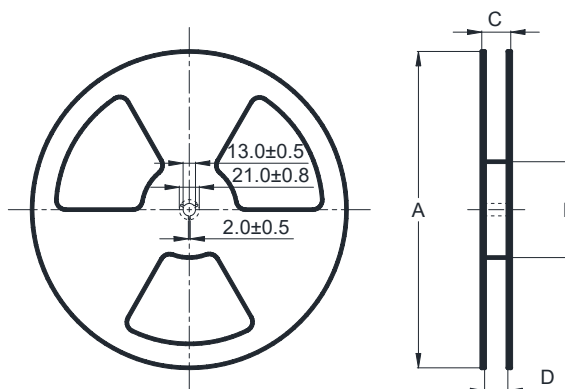
Packaging is referred to the international standard IEC 60286-3.

Packaging direction

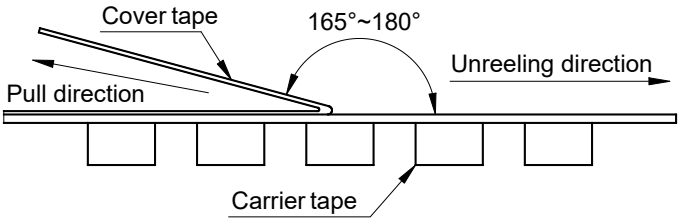
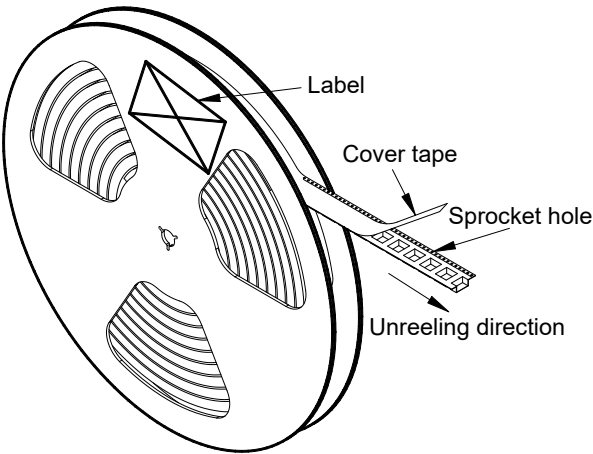


Reel dimensions

A	330 ± 2.0
B	100 Min
C	20.0Max
D	12.5 Min

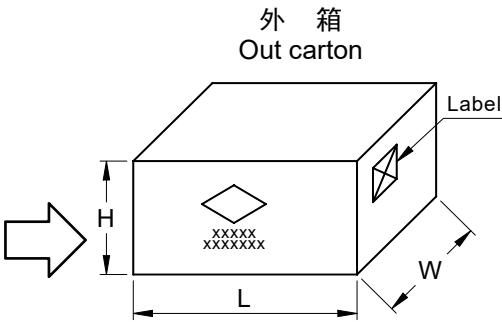
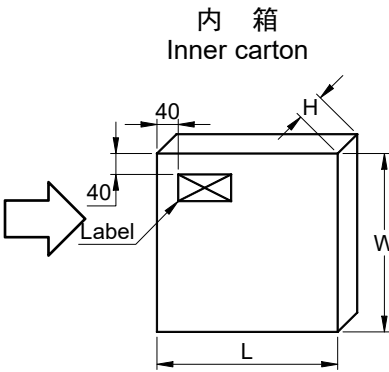
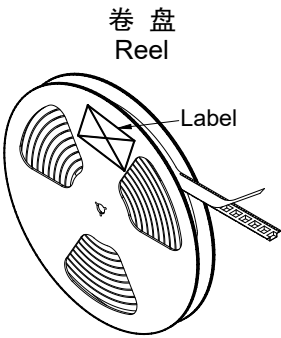


Cover tape peel-off condition



※ 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

SHC0420	每盘 包装数量 Per Reel Quatity	内箱 包装数量 Inner Carton Quatity	外箱 包装数量 Out Carton Quatity
	3,000 pcs	(3,000×2) = 6,000 pcs	(6,000×3) = 18,000 pcs