

承 认 书
SPECIFICATION FOR APPROVAL

客 户 Customer:

产品名称 Project:

功率电感

规格型号 Part No:

NR5040-XXXM

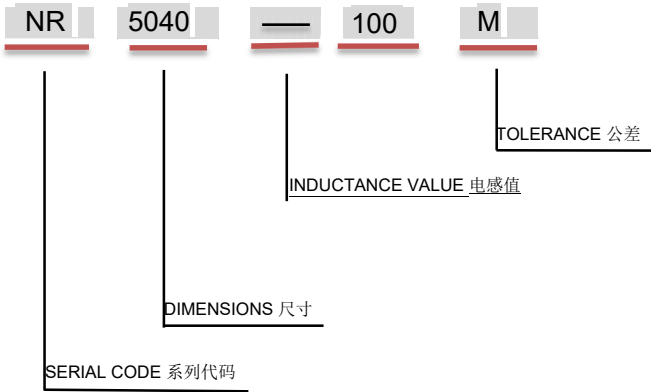
贵公司承认印 Approval signatures

料 号/Part No.	签 章/Signatures

日期 Date:

拟制/Drawn	王宗华	
审核/Check	陈森森	
批准/Approved	张春华	

● 编码原则Part Numbering .

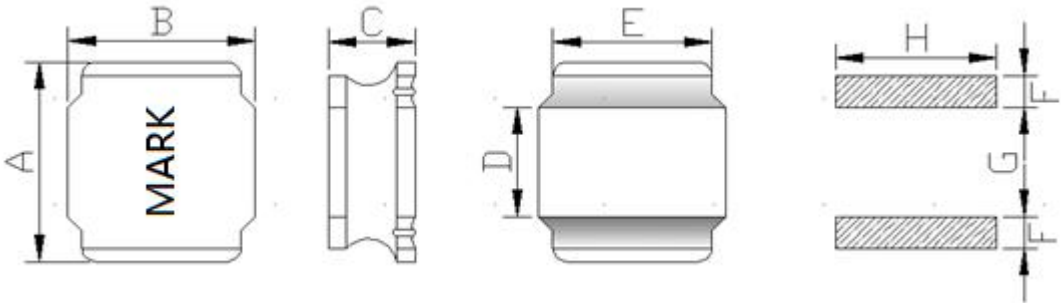


Code 代码	Tolerance 公差
J	±5%
K	±10%
L	±15%
M	±20%
P	±25%
N	±30%

- 电感值Inductance Value
(1R0:1.0uH; 100: 10uH; 101:100uH)

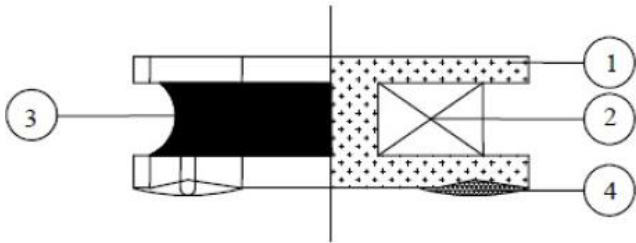
● 产品尺寸及推荐焊盘尺寸Dimensions and Recommend PC Board Pattern (unit: mm) .

单位Unit: mm



A	5.00±0.2
B	5.00±0.2
C	4.0 Max
D	2.2±0.3
E	4.0 Ref
F	1.6 Ref
G	2.0 Ref
H	4.7 Ref

● 材料清单Material List



NO.	PARTS	MATERIAL	UL FILE NO.	TEMP. CLASS
1	CORE	Ni-Zn CORE OR EQUIVALENT	NA	NA
2	WIRE	POLYURETHANE ENAMELLED COPPER WIRE OR EQUIVALENT	E258243	180℃
3	ADHESIVE	EPOXY RESIN OR EQUIVALENT	NA	NA
4	SOLDER	Sn99.3-Cu0.7 OR EQUIVALENT	NA	NA

*NA:NOT APPLICABLE.

● 储存条件/注意的事项Storage conditions/Matters need attention

(1). 贮存温度、湿度条件:

Storage temperature and humidity conditions :

a .产品包装与载体:温度- 10℃~ + 40℃,相对湿度低于60%

Product packing with Carrier tape: -10℃~+40℃ and less than 60% RH

b.单独的产品:温度-20℃~ + 60℃,相对湿度低于60%

Product alone: -20℃~+60℃ and less than 60% RH

(2). 产品在6个月内使用(注意:产品一经拆开包装,须尽快使用)

Products should be used within 6 months.(Note that the product should be used as soon as possible once it is folded)

(3). 包装材料应保存在空气中不存在氯或硫的地方

The packaging material should be kept where no chlorine or sulfur exists in the air

(4). 不要用手指触摸电极(焊接端子),因为这可能导致焊接能力的下降

Do not touch the electrodes (soldering terminals) with fingers as this may lead to deterioration of solder ability.

(5). 个别零件强烈建议使用镊子或真空取料机散装搬运应确保尽量减少磨损和机械冲击

The use of tweezers or vacuum pick-ups is strongly recommended for individual components.Bulk handling should ensure that abrasion and mechanical shock are minimized.

5、电性能参数表 Electrical Characteristics List

规格型号 Part NO.	电感量 Tolerance(μ H)	测试频率 Test Freq. (kHz/v)	直流电阻 DCR Max (Ω)	饱和电流 Isat (A)	温升电流 Irms (A)
NR5040 - 1R0N	1.0	100/0.25	0.017	7.35	4.90
NR5040 - 1R2N	1.2	100/0.25	0.021	6.50	4.15
NR5040 - 1R5N	1.5	100/0.25	0.021	6.30	4.30
NR5040 - 2R2N	2.2	100/0.25	0.025	4.90	3.80
NR5040 - 3R3M	3.3	100/0.25	0.031	3.95	3.40
NR5040 - 3R9M	3.9	100/0.25	0.035	3.55	3.20
NR5040 - 4R7M	4.7	100/0.25	0.039	3.50	3.00
NR5040 - 5R6M	5.6	100/0.25	0.046	3.00	2.80
NR5040 - 6R8M	6.8	100/0.25	0.056	2.90	2.50
NR5040 - 8R2M	8.2	100/0.25	0.062	2.70	2.30
NR5040 - 100M	10	100/0.25	0.083	2.35	2.10
NR5040 - 150M	15	100/0.25	0.112	2.00	2.00
NR5040 - 220M	22	100/0.25	0.168	1.60	1.50
NR5040 - 330M	33	100/0.25	0.244	1.30	1.20
NR5040 - 470M	47	100/0.25	0.354	1.10	1.00
NR5040 - 560M	56	100/0.25	0.494	1.00	0.80
NR5040 - 680M	68	100/0.25	0.520	0.90	0.80
NR5040 - 101M	100	100/0.25	0.728	0.75	0.70
NR5040 - 151M	150	100/0.25	0.975	0.65	0.60
NR5040 - 181M	180	100/0.25	1.690	0.60	0.50
NR5040 - 201M	200	100/0.25	1.760	0.55	0.45
NR5040 - 221M	220	100/0.25	1.820	0.48	0.40
NR5040 - 331M	330	100/0.25	2.730	0.42	0.40
NR5040 - 471M	470	100/0.25	3.900	0.37	0.35
NR5040 - 561M	560	100/0.25	4.920	0.33	0.31
NR5040 - 681M	680	100/0.25	5.070	0.30	0.25
NR5040 - 102M	1000	100/0.25	7.800	0.25	0.20
NR5040 - 152M	1500	100/0.25	13.300	0.20	0.16

※公差Tolerance: N:±30%、M:±20%、K:±10%.

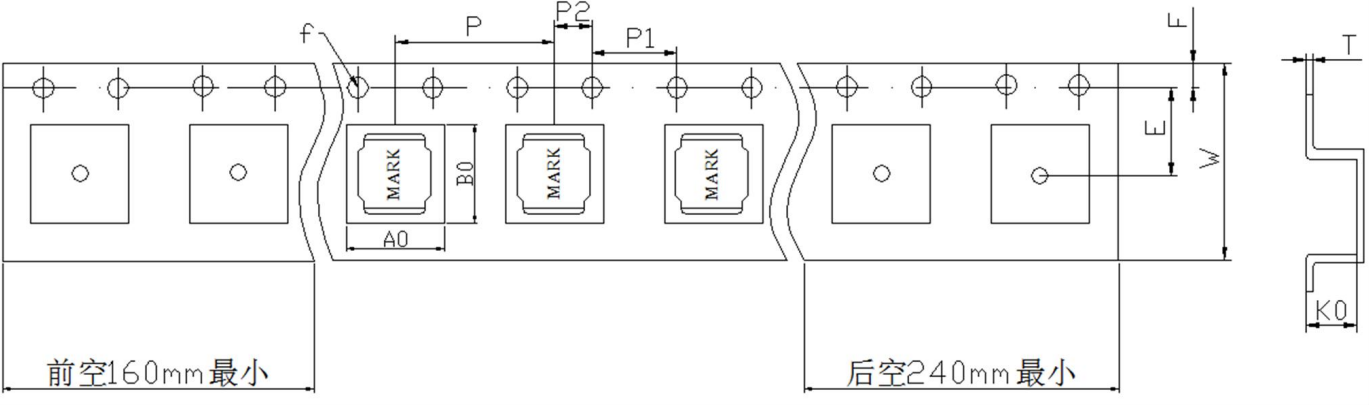
※工作温度Operating temperature rang: -40 ℃ to +125℃ (Including Self-heating)

※储存温度Storage temperature rang: -40 ℃ to +125℃

额定电流: 指使电感量比初始值下降30%Max或电感器表面温度上升 $\Delta T \leq 40^\circ\text{C}$ 的电流值 (参考周围环境温度 25°C)。The rated DC current is that which cause at 30%Max inductance reduction from the initial value or inductor surface temperature to rise by $\Delta T \leq 40^\circ\text{C}$, whichever is smaller (Reference ambient temperature 25°C)。)

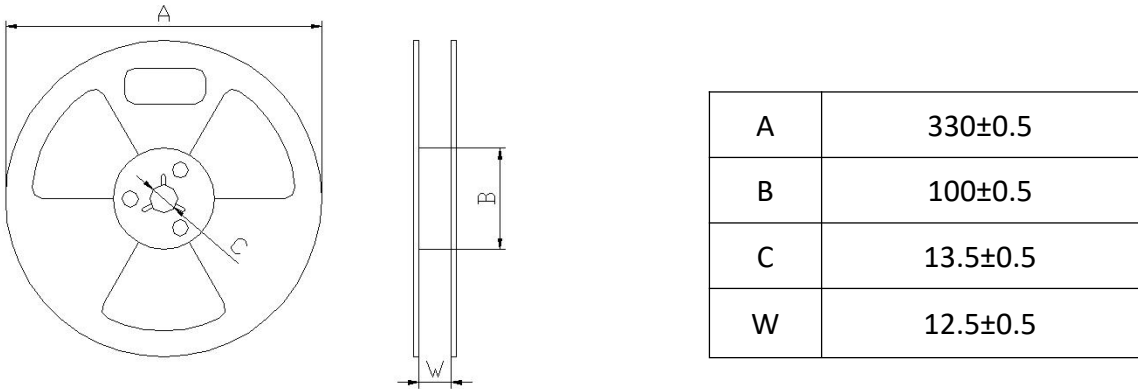
● 包装 Packaging Information

1) 载带包装示意图 Tape packing diagram



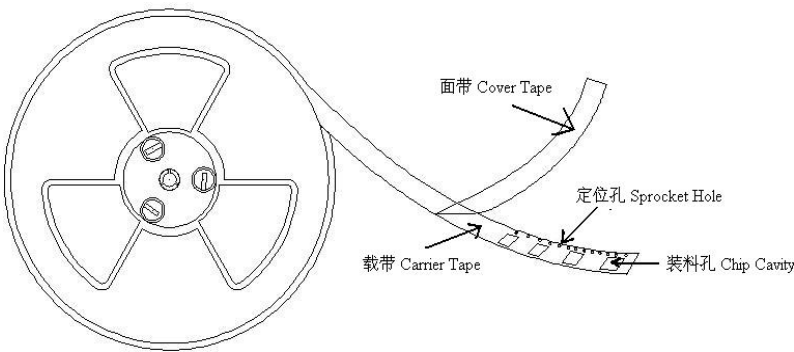
ITEM	W	A0	B0	K0	P	E	F	D0	P0	P2	T
DIM	12.00	5.30	5.30	4.20	8.00	5.50	1.75	1.50	4.00	2.00	0.30
TOLE	±0.3	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	+0.1	±0.1	±0.1	±0.05

2) 卷盘包装示意图 Tape packing diagram



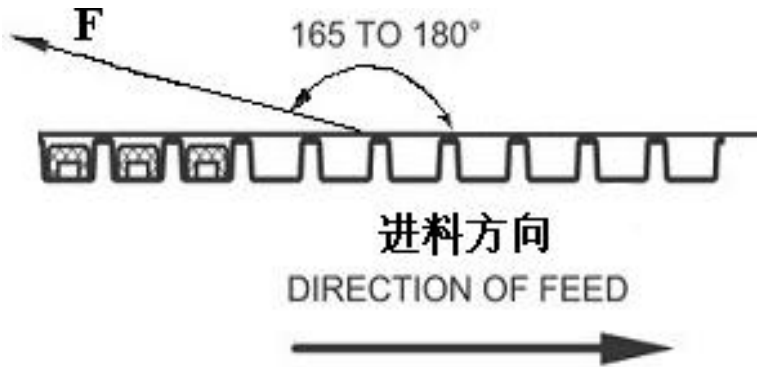
A	330±0.5
B	100±0.5
C	13.5±0.5
W	12.5±0.5

3) 卷盘包装示意图 Tape packing diagram

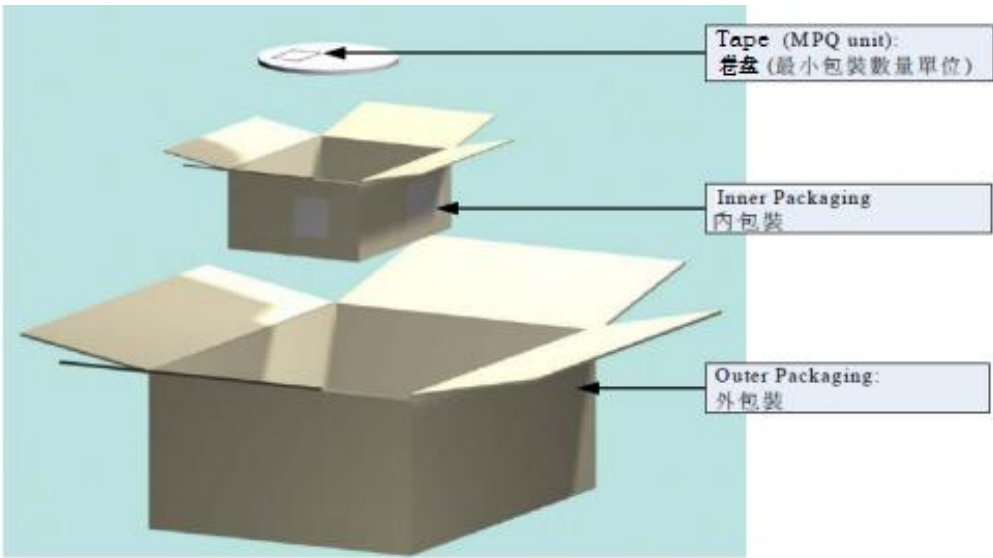


4) 剥离强度要求Peeling required

- ①F 力大小： 20~100g;
- ②面带剥离角度： 165°~180°。



5) 包装数量 Packing quantity



项目 (Project)	数量 (PCS)	尺寸规格 (Size:mm)
盘(Reel)	1500	13"
内盒 (Inner box)	6000	340mm*340mm*65mm
外箱 (Out box)	18000	360mm*360mm*225mm

MECHANICAL		
TEST ITEM	SPECIFICATION	
Resistance to Soldering heat (reflow soldering)	There shall be no damage or problems.	Temperature profile of reflow soldering The specimen shall be passed through the reflow oven with the condition shown in the above profile for 1 time. The specimen shall be stored at standard atmospheric conditions for 1 hour, after which the measurement shall be made.
ELECTRICAL		
TEST ITEM	SPECIFICATION	TEST DETAILS
Insulation resistance	There shall be no other damage or problems.	DC 100V voltage shall be applied across this sample of top surface and the terminal. The insulation resistance shall be more than $1 \times 10^8 \Omega$.
Dielectric withstand voltage	There shall be no other damage or problems.	AC 100V voltage shall be applied for 1 minute across the top surface and the terminal of this sample
Temperature characteristics	$\Delta L/L 20^\circ\text{C} \leq \pm 10\%$ $0 \sim 2000 \text{ ppm}/^\circ\text{C}$	The test shall be performed after the sample has stabilized in an ambient temperature of -40 to $+125^\circ\text{C}$, and the value calculated based on the value applicable in a normal temperature and normal humidity shall be $\Delta L/L 20^\circ\text{C} \leq \pm 10\%$.