

承 认 书

SPECIFICATION FOR APPROVAL

客 户 名 称:

Customer Name: _____

客 户 料 号 :

Customer P/N: _____

产 品 名 称:

功率电感

Product Name: _____

产 品 料 号:

YLN5040系列

Product P/N: _____

客户承认栏 APPROVED FOR CUSTOMER	DRAWN (制图)	CHECKED (检查)	APPROVED (确认)
	邓晓婷	王剑锋	李凯豪
	2022-11-16	2022-11-16	2022-11-16
确认无误后敬请签回 (Please Return After Approved)			

深圳市一络电子科技有限公司

联系人: 朱小姐 13461525408

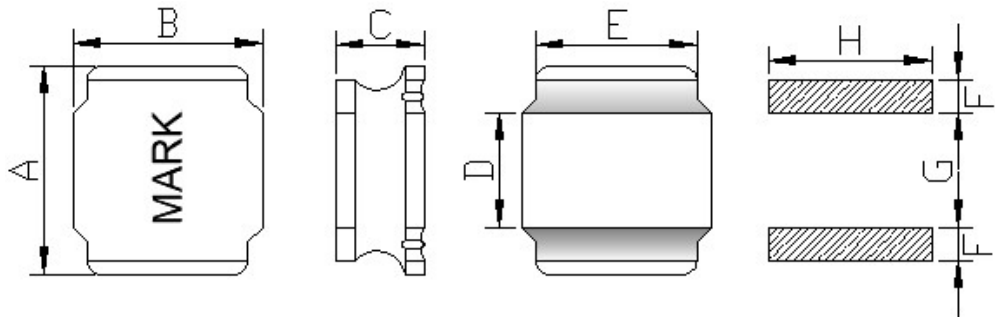
修改履历表

Modify Resume

[illegible]

1、形状及尺寸Shape and Dimensions

单位Unit: mm



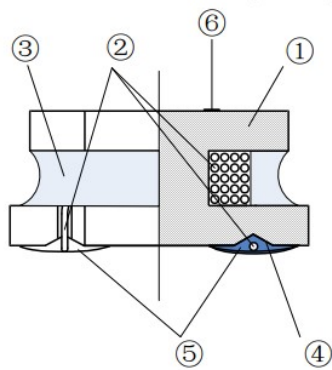
A	5.00±0.2
B	5.00±0.2
C	4.0 Max
D	2.2 Ref
E	4.0 Ref
F	1.6 Ref
G	2.0 Ref
H	4.7 Ref

2、产品标识 Product Identification

YLNR 5040 - 100 M T
① ② ③ ④ ⑤

- ①系列名称Series name
- ②产品尺寸Product dimensions (A* B * C)
- ③电感值Inductance Value (1R0:1.0uH; 100: 10uH; 101:100uH)
- ④电感公差Inductance Tolerance (K:10% ; M:20% ; N:30%)
- ⑤包装Package(T:磁带/卷轴Tape/Reel、B: 散装Bulk)

3、结构图 Structural drawing



NO.	Components	Material
①	Ferrite Core	Ni-Zn Ferrite
②	Wire	Polyurethane system enameled copper wire
③	Magnetic Glue	Epoxy resin and magnetic powder
④	Plating Electrodes	Plating: Ag/Ni/Sn
⑤	Outer Electrodes	Top surface solder coating:Sn99.7%/Cu0.3%
⑥	Marking	Nitrocellulose

4、温度范围 Temperature Range

- ※工作温度Operating temperature rang: -40 ℃ to +125℃ (Including Self-heating)
- ※储存温度Storage temperature rang: -40 ℃ to +125℃
- ※湿度Humidity: 25 to 85% RH

文件编号 File Number	YL-WI-31104	版本号 Version Number	A0	页码 page	2/6
---------------------	-------------	-----------------------	----	------------	-----

5、电气特性 Electrical Characteristics

规格型号 Part NO.	电感量 Tolerance(μH)	测试频率 Test Freq.	直流电阻 DCR Max (Ω)	饱和电流 Isat (A)	温升电流 Irms (A)
YLN5040-1R0NT	1.0	100KHz,1V	0.017	7.35	4.90
YLN5040-1R2NT	1.2	100KHz,1V	0.021	6.50	4.15
YLN5040-1R5NT	1.5	100KHz,1V	0.021	6.30	4.30
YLN5040-2R2NT	2.2	100KHz,1V	0.025	4.90	3.80
YLN5040-3R3MT	3.3	100KHz,1V	0.031	3.95	3.40
YLN5040-3R9MT	3.9	100KHz,1V	0.035	3.55	3.20
YLN5040-4R7MT	4.7	100KHz,1V	0.039	3.50	3.00
YLN5040-5R6MT	5.6	100KHz,1V	0.046	3.00	2.80
YLN5040-6R8MT	6.8	100KHz,1V	0.056	2.90	2.50
YLN5040-8R2MT	8.2	100KHz,1V	0.062	2.70	2.30
YLN5040-100MT	10	100KHz,1V	0.083	2.35	2.10
YLN5040-150MT	15	100KHz,1V	0.112	2.00	2.00
YLN5040-220MT	22	100KHz,1V	0.168	1.60	1.50
YLN5040-330MT	33	100KHz,1V	0.244	1.30	1.20
YLN5040-470MT	47	100KHz,1V	0.354	1.10	1.00
YLN5040-560MT	56	100KHz,1V	0.494	1.00	0.80
YLN5040-680MT	68	100KHz,1V	0.520	0.90	0.80
YLN5040-101MT	100	100KHz,1V	0.728	0.75	0.70
YLN5040-151MT	150	100KHz,1V	0.975	0.65	0.60
YLN5040-181MT	180	100KHz,1V	1.690	0.60	0.50
YLN5040-201MT	200	100KHz,1V	1.760	0.55	0.45
YLN5040-221MT	220	100KHz,1V	1.820	0.48	0.40
YLN5040-331MT	330	100KHz,1V	2.730	0.42	0.40
YLN5040-471MT	470	100KHz,1V	3.900	0.37	0.35
YLN5040-561MT	560	100KHz,1V	4.920	0.33	0.31
YLN5040-681MT	680	100KHz,1V	5.070	0.30	0.25
YLN5040-102MT	1000	100KHz,1V	7.800	0.25	0.20
YLN5040-152MT	1500	100KHz,1V	13.300	0.20	0.16

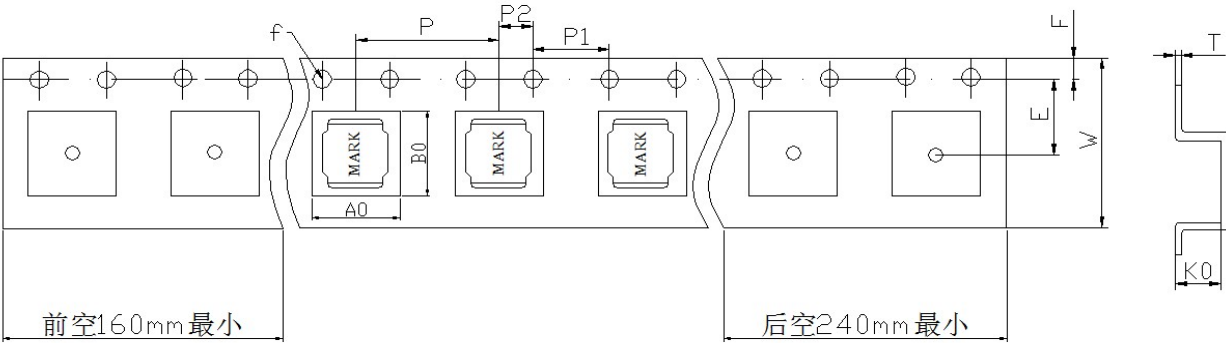
NOTE:

※公差Tolerance: N:±30%、M:±20%、K:±10%.

※额定电流: 电感量比初始值下降 30% Max或电感器表面温度上升 $\leq 40^{\circ}\text{C}$ 的电流值, 以较小者为准 (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 $\leq 40^{\circ}\text{C}$, whichever is smaller (Reference ambient temperature 25°C)。

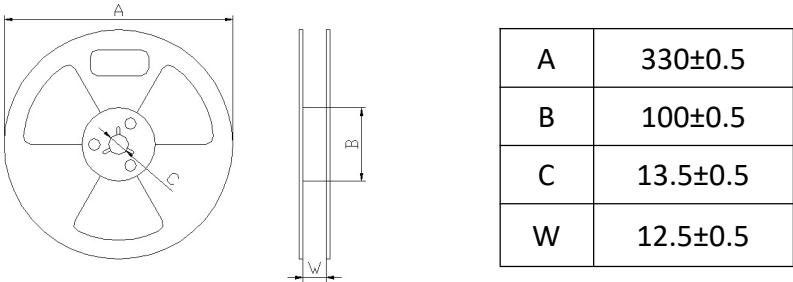
6、包装 Packaging

6.1 载带尺寸 Tape Dimension

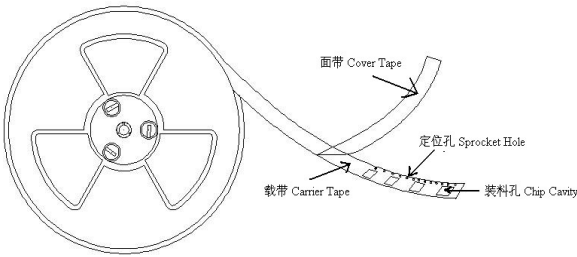


W	A0	B0	K0	P	E	F	f	P1	P2	T
12±0.3	5.3±0.1	5.3±0.1	4.2±0.1	8.0±0.1	5.5±0.1	1.75±0.1	1.5±0.10	4.00±0.1	2.00±0.1	0.35±0.05

6.2 卷盘包装示意图 Tape packing diagram

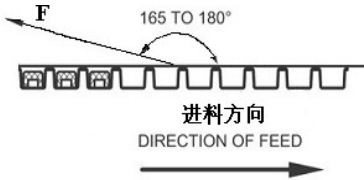


6.3 卷盘包装示意图 Tape packing diagram



6.4 剥离强度要求 Peeling required

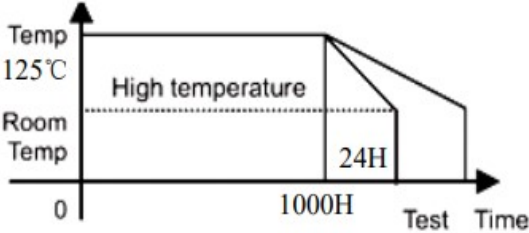
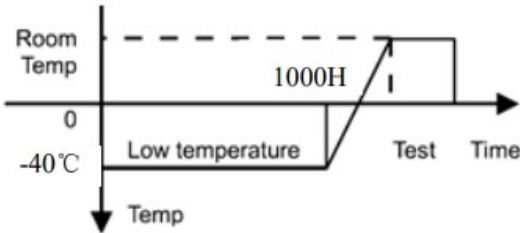
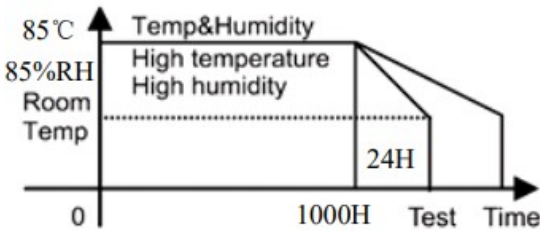
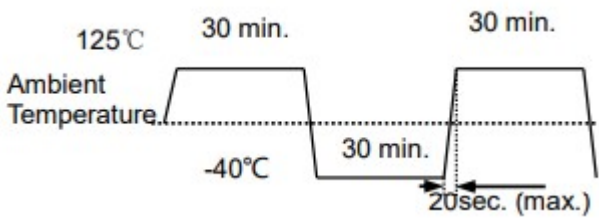
- ①F力大小F force: 10~130g;
- ②面带剥离速度Peeling speed: 300mm/min±10%;
- ③面带剥离角度: 165°~180°;

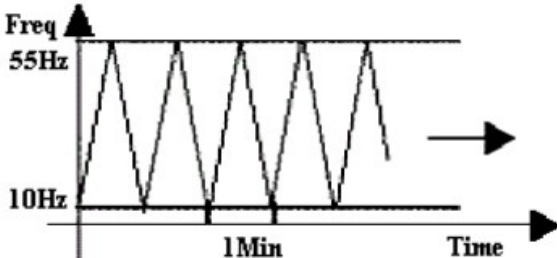
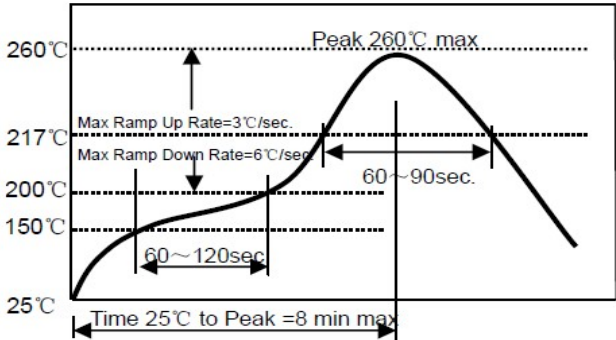


6.5 包装数量 Packing quantity

卷盘Reel (PCS)	内盒Inner box (PCS)	外箱Out box (PCS)
1500	6000	18000

7、可靠性测试 Reliability Test

项目 Item	特性 Required Characteristics	测试方法 Test Method/Condition
高温储存 High temperature storage test	1、外形没有变形 No case deformation or change in appearance. 2、电感值变化小于等于 10% $\Delta L/L \leq 10\%$.	温度：125±2℃ Temperature: 125±2℃ 时间：1000 小时 Time : 1000 hours 试验后在室温下放置 24±4 小时后测试 Measurement at 24±4 hours after test conclusion. 
低温贮存 Low temperature storage test		温度：-40±2℃ Temperature : -40±2℃ 时间：1000小时 Time : 1000 hours 试验后在室温下放置24±4小时后测试 Measurement at 24±4 hours after test conclusion. 
潮湿测试 Humidity test		温度：25-85℃ Temperature: 25-85℃, 湿度：85% RH Humidity :85% RH 时间：1000小时 Time : 1000 hours. 试验后在室温下放置24±4小时后测试 Measurement at 24±4 hours after test conclusion. 
热冲击 Thermal shock test		-40℃放置 30分种然后到 125℃放置 30分种为一个循环，一共进行 1000个循环 First -40℃ for 30min. time, last 125℃ 30min. time as 1 cycle. Go through 1000 cycles. 

文件编号 File Number	YL-WI-31104	版本号 Version Number	A0	页码 page	5/6
项目 Item	要求 Requirements	测试方法 Test Method/Condition			
可焊性 Solderability test	端子焊锡面上锡90%以上 Terminal area must have 90% min solder coverage.	产品沾助焊剂后放入 $245\pm 5^{\circ}\text{C}$ 锡中 5 ± 0.1 秒。 Dip pads in flux then dip in solder pot at $245\pm 5^{\circ}\text{C}$ for 5 ± 0.1 second. 焊料: Sn99.7%、Cu0.3%。 Solder: Sn99.7%、Cu0.3%。 助焊剂: 松香焊剂 Flux: rosin flux.			
振动 Vibration test		振幅:10~55Hz. 1.5mm,每个方向振动2小时, 共三个方向6小时。 Apply frequency 10~55Hz. 1.5mm amplitude in each of perpendicular direction for 2 hours in each 3 mutually perpendicular directions.(total 6 hours). 			
耐焊性 Heat endurance of reflow soldering	1、外形没有变形 No case deformation or change in appearance. 2、电感值变化小于等于10% $\Delta L/L \leq 10\%$	参考以下回流焊曲线, 回流焊最高温度: $260\pm 5^{\circ}\text{C}$, 5~10 secs. Refer to the next page reflow curve, The peak temperature: $260\pm 5^{\circ}\text{C}$, 5~10 secs. 			
跌落 Drop test		从距混凝土地面1米高自由落下, 重复10次 Drop 10 times on a concrete floor from a height of 1m.			
端子强度 Terminal strength Push test	元件的端子与本体结合无松动、无脱落。 Strong bond between the pad and the core, without come off PC board.	将电感器用 $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$, $20 \text{ s} \pm 5 \text{ s}$ 焊在带有0.3 mm厚锡膏的基板上, 然后用治具垂直电极面方向加压 10 N, $10 \text{ s} \pm 1 \text{ s}$ 。 Inductors shall be subjected to $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for $20 \text{ s} \pm 5 \text{ s}$ Soldering in the base whit 0.3mm solder. And then aplomb electrode way plus tax 10 N for $10 \pm 1 \text{ s}$ seconds.			

文件编号 File Number	YL-WI-31104	版本号 Version Number	A0	页码 page	6/6
8、注意事项Note things 8.1 本承认书保证我司产品作为一个单体时的质量情况。当我司产品被安装到贵司产品上时，请保证贵司的产品已根据贵司的规范进行了有效评估和确认。 This product specification guarantees the quality of our product as a single unit. Please make sure that your product is evaluated and confirmed against your specifications when our product is mounted to your product. 8.2 如果贵司对我司产品的使用已超过了本承认书所界定的产品功能，那么对于由此引发的失效，我司将不予保证。 We cannot warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification. 8.3 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) . 8.4 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. 8.5 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. 8.6 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. 8.7 本承认书在客户收到30 天之内，必须签章返回，逾期视为默认。 The Specification Approval should be sent back to the supplier with customer`schop on it within 30 days after receiving it, or we will take it as approved by customer`s automatically. 8.8 如有特殊规格要求，请事前联络我司技术部人员。 In case of special specifications please contact our technical department prior staff.					