



深圳市蓝宝安科电子有限公司

Shenzhen LanbaoAnke Electronics Co.,Ltd.

承 认 书

APPROVAL SHEET

编号 NO.	LB-MH-01
版次 Ver.	A/2

客户 Customer	
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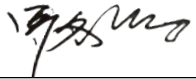
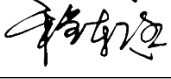
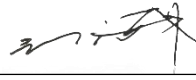
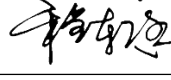
品名 Product	大电流陶瓷贴片保险丝
系列 Series	MH Series

料号Part No.	规格描述Specification	备注Remark
蓝宝 LB fuse		
客 户 Customer		

供应商-蓝宝 Supplier-LB fuse	零件承认章 Approval Signet	客户 Customer	零件承认章 Approval Signet
制作 Make			
审查 Check			
批准 Approval			

联络Contact			
业务Sales	电话Telephone	手机Cellphone	邮箱E-mail
			lanbaofuse@163.com
零件承认后敬请回签一份给我司留存。			

History of Change变更记录

NO.	日期 Date	描述 Description	版次 Edition	修改 modified by	审核 Checked by
1	2022.09.18	新制订	A/1		
2	2023.04.03	更改为新封面	A/2		
3					
4					
5					
6					
7					
8					
9					
10					
11					

1. 适用范围 / SCOPE

此份规格书仅涵盖MH系列产品.

This specification covers MH series devices, which is SMD Fuse.

2. 产品名称及编码 / TYPE NUMBER & PART NUMBER

产品名称/ TYPE NUMBER

MH	40A	80V	
①	②	③	④

1 系列号: MH (尺寸: 7.3 mm *5.8 mm *4.0mm)

Series Number: MH (Size: 7.3 mm *5.8 mm *4.0mm)

2 额定电流: (例如:40A=40 安培)

Rating Current : (Ex. :40A = 40 Ampere)

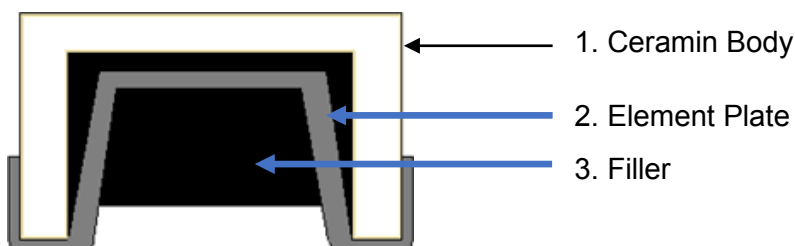
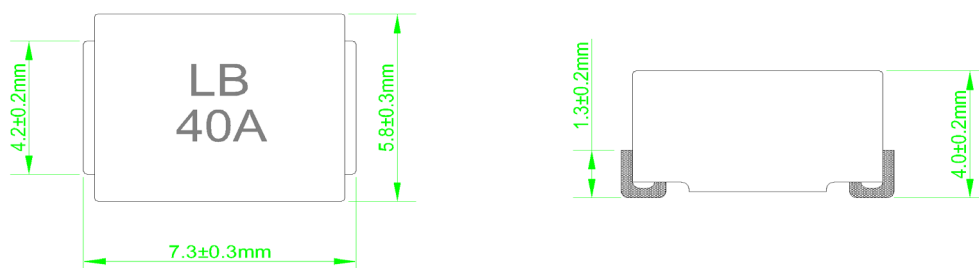
3 额定电压: (例如:80V=80伏特)

Rating Voltage : (Ex. :80V = 80Volt)

4 安规认证 / Safety Approval

3. 产品尺寸和结构 / SIZE AND STRUCTURE

3-1 尺寸 (单位: mm) / SIZE (Unit: mm)



4. 基本信息 / ORDERING INFORMATION

Part NO. 料号	Rated votage 额定电压 (DC)	Rated Current 额定电流 (A)	Breaking Capacity 分断电流	Typical Cold Resistance (mOhms) 标准冷电阻	Typical Pre-Arcing I ² T (A ² Sec) 熔化热值
MH20A80V	80V DC	20	80VDC@1500A	0.0020	162
MH30A80V		30		0.0012	369
MH40A80V		40		0.0010	521
MH50A80V		50		0.0008	1208
MH60A80V		60		0.00065	1616
MH80A80V		80		0.00055	2624
MH100A80V		100		0.00040	6631

说明/Notes :

- “典型电阻”是在通以小于额定电流的 10% 的弱电流条件下量测的阻抗。
Nominal Resistance measured with < 10% rated current ;
- “典型 I²t ”是指自通电 1000% I_n 所对应的 I²t。
Melting I²t at 1000% of current rating

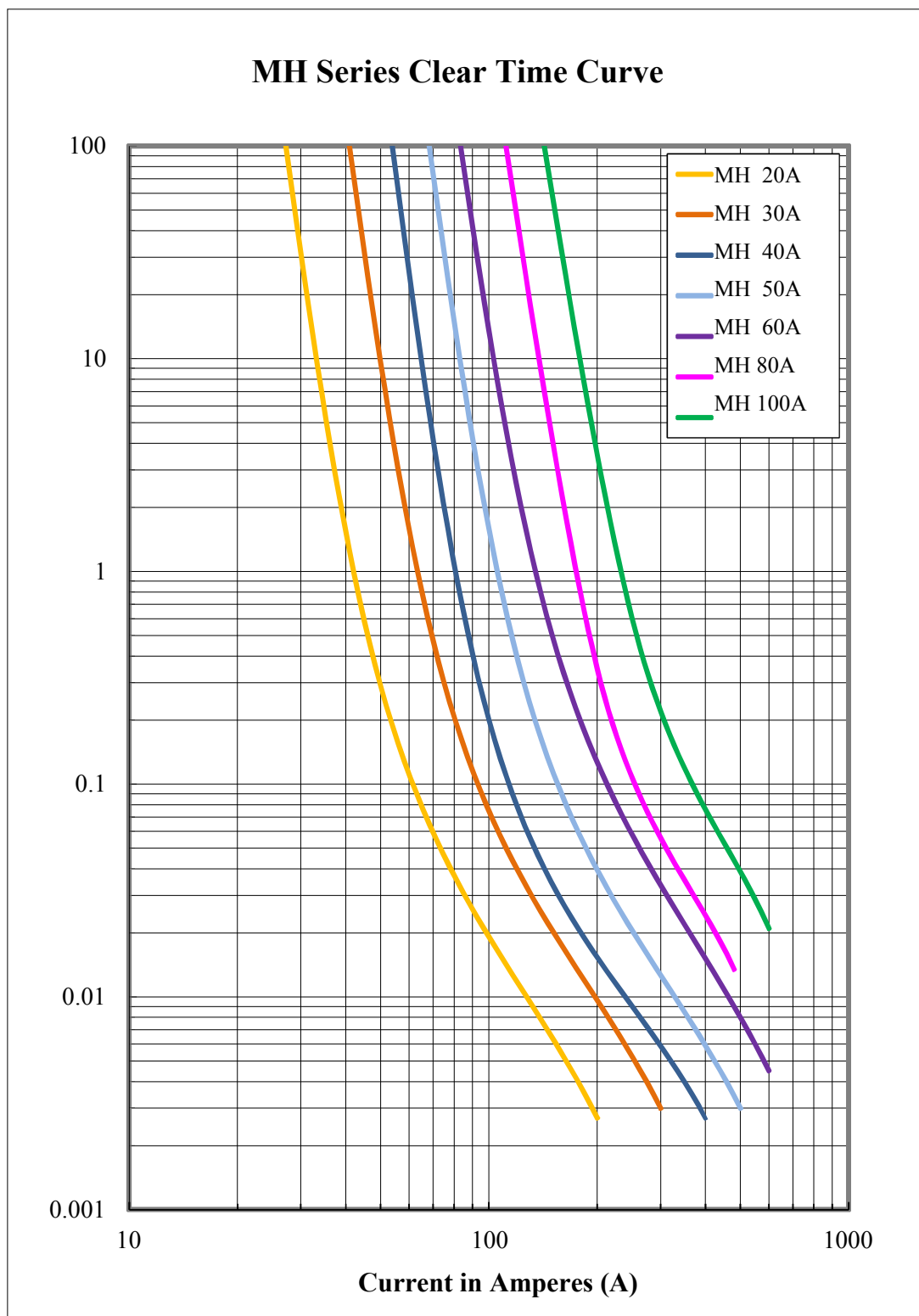
5. 电气特性 / ELECTRICAL CHARACTERISTICS

5-1 时间-电流特性 / Pre-Arcing Time-Current Characteristics (limits)

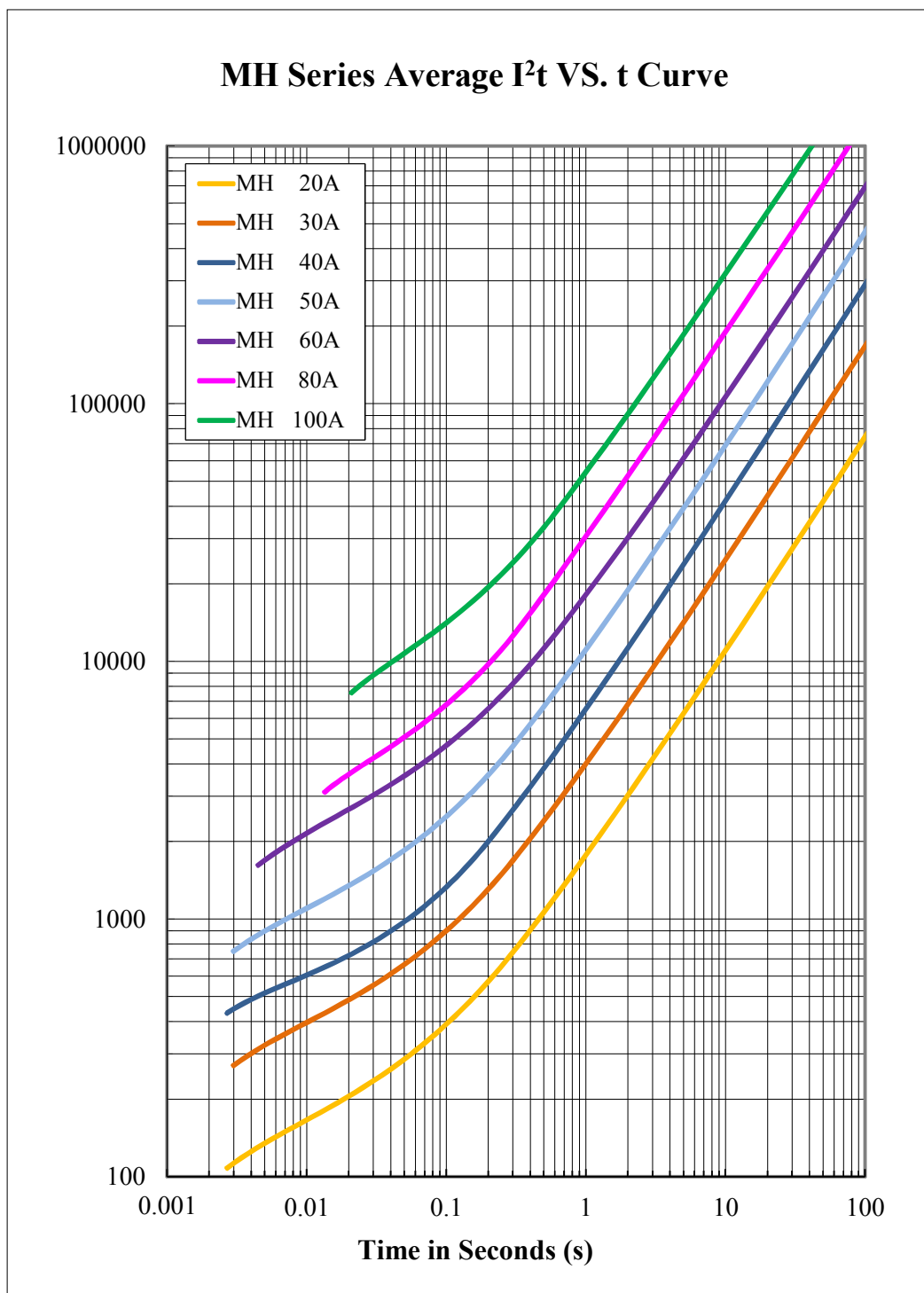
RATED CURRENT	100% I _N	250% I _N
20A to 100A	Min.	Max.
	4 hours	60s

I_n : 25℃ 下额定电流 / Rating Current at 25℃

5-2 时间-电流特性曲线 / Time-Current Curve:



5-3 时间T—I²T特性曲线/Time-I²T Curve:



6. 产品信赖性测试规范/PRODUCT RELIABILITY TEST STANDARD

Test item	Test Description & Reference
Humidity unload test	MIL-STD-202G, Method 103B, Test Condition A Heat ($40\pm0.5^{\circ}\text{C}$) & High Humidity ($95\pm1\%$ RH), 240 hours, $\Delta R < 15\%$
Thermal shock test	MIL-STD-202G, Method 107G, Test Condition B Temperature setup: $25^{\circ}\text{C} \sim -65^{\circ}\text{C} \sim 25^{\circ}\text{C} \sim 125^{\circ}\text{C}$ Time setup: -65°C (30min) $\sim 25^{\circ}\text{C}$ (5min) $\sim 125^{\circ}\text{C}$ (30min) $\sim 25^{\circ}\text{C}$ (5min), 5 cycles, $\Delta R < 15\%$
Vibration test	MIL-STD-202G, Method 201A Frequency setup: $10 \sim 55 \sim 10$ Hz Time setup: 1 Minute/cycle (X-Y-Z, 120 Cycles, 6hours), $\Delta R < 15\%$
Salt spray Test	MIL-STD-202G, Method 101E, Test Condition A Salt spray concentration: $5 \pm 1\%$ Test liquid temperature: $35 \pm 0.5^{\circ}\text{C}$ 96hours, $\Delta R < 15\%$
Solderability test	Reference IEC 68-2-58 Temperature setup: $235 \pm 5^{\circ}\text{C}$, 2 ± 0.2 sec After test terminal electrode wetting area must be greater than 95%
Resistance to Soldering Heat Test	Reference IEC 68-2-58 Temperature setup: $260 \pm 5^{\circ}\text{C}$, 10 ± 1 sec, $\Delta R < 15\%$ Air does not leak from the case in the item of Solder ability.
Pushing Force Test	Pushing $\phi 2.5$ Pushing force: Min 5 kgf (49N)

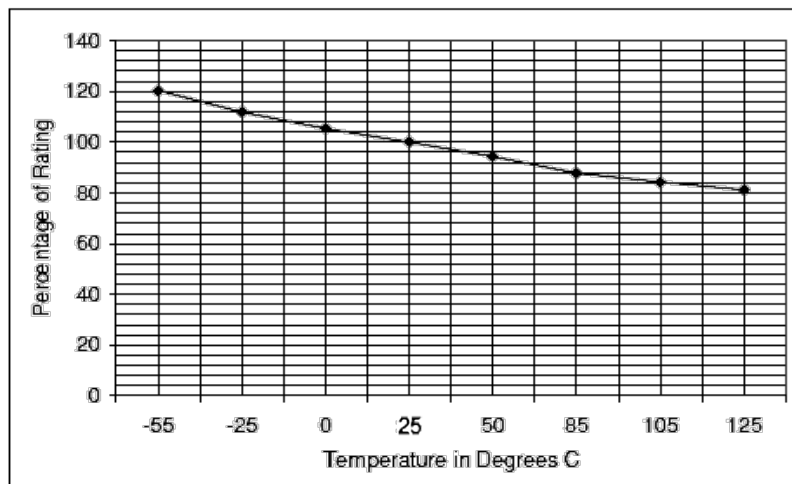
7. 环境特性 / ENVIRONMENTAL CHARACTERISTIC

7-1 操作温度范围: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$ / Operating Temperature: $-55^{\circ}\text{C} \sim 125^{\circ}\text{C}$, 若贵司操作环境温度超出 23 ± 3

$^{\circ}\text{C}$ 范围, 在选用保险丝规格时, 需考虑操作环境温度对保险丝的影响。请参照: 温度-电流曲线图。

When choosing the fuse's specification, if the operating environmental temperature beyond the scope from $20\sim 26^{\circ}\text{C}$, you should consider the environmental temperature's affection to fuses.

please refer:



7-2 存储条件 / Storage Conditions

在温度10℃~40℃、相对湿度≤75%的密闭条件下可存放2年。

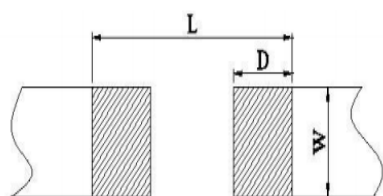
Under airtight in temperature10℃~40℃、relative humidity ≤75% can store 2 years.

在温度10℃~40℃、相对湿度为95%的非露天下最多可存放30天。

Without dew in temperature10℃~40℃、relative humidity be 95% maximum value for 30days.

8. 焊垫尺寸及焊接条件 / SOLDER PAD SIZE AND WELDING CONDITIONS

8-1 焊垫尺寸建议 / Recommended Size of the Pad.



L	W	D
9.8mm	5.8mm	2.7mm

8-2 焊接参数建议 / Recommended Customer Soldering Parameters

温度曲线 Temperature Condition

预热段 : 145 ± 15℃, max. 120 sec

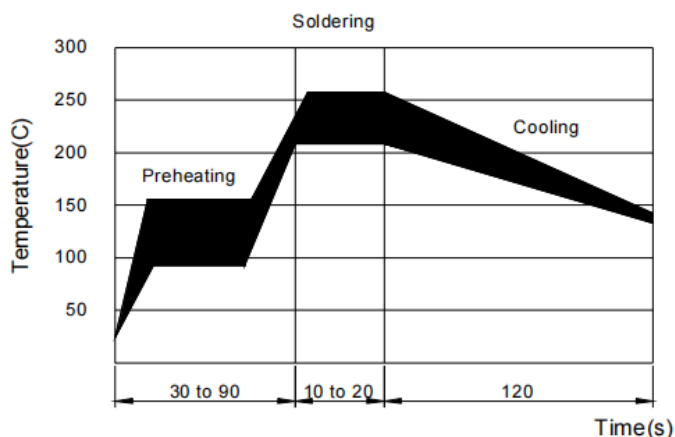
Preheating : 145 ± 15℃, max.120 sec.

焊锡段 : min. 220℃, max. 60 sec.

Soldering: min. 220℃, max. 60 sec.

允许最高温度 : 260±5℃, max. 10sec.

Maximum temperature : 260±5℃, max. 10sec.



允许烙铁焊接条件(热风设备): 350℃, 3~5seconds

Rework Temperature (hot air equipment) : 350℃, 3~5seconds

8-3 焊接方法建议 / Recommended Reflow Methods

焊接热源方式可用红外线, 热蒸气, 热风

IR, vapor phase oven, hot air oven.

如果焊锡温度超过允许最高温度, 则产品本身会有功能损坏的疑虑

If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

9. 批量生产出货测试项目 / LOT ACCEPTANCE TEST REQUIREMENTS

9-1 外观 / Visual

方法：利用放大镜进行检查 Procedure: Visual

标准：不能有脏污、不洁、文印错误、破损等 Acceptance Criteria: No parts are outstandingly stained.

9-2 尺寸 / Dimensions

方法：使用合适且经校正的标尺

Procedure: As appropriate, calipers, micrometers, optical comparator, or approved gages.

标准：尺寸均在规定标准范围内

Acceptance Criteria: No parts outside specific dimensions.

9-3 时间-电流特性 / Time-Current Characteristics

方法：测试电流 $I=1.0I_n$ ； $2.5I_n$ ；量测出个别电流下的对应时间

Procedure : $I=1.0I_n$ ； $2.5I_n$ ； and measure the value of time individually by meter at 25°C

标准：对应时间值均在规定标准范围内/Acceptance Criteria: All parts must within the specific .

9-4 分断能力 / Breaking Capacity

方法：测试电压\电流为：80VDC@1500A；

标准：元件不发生持续电弧燃烧及爆裂

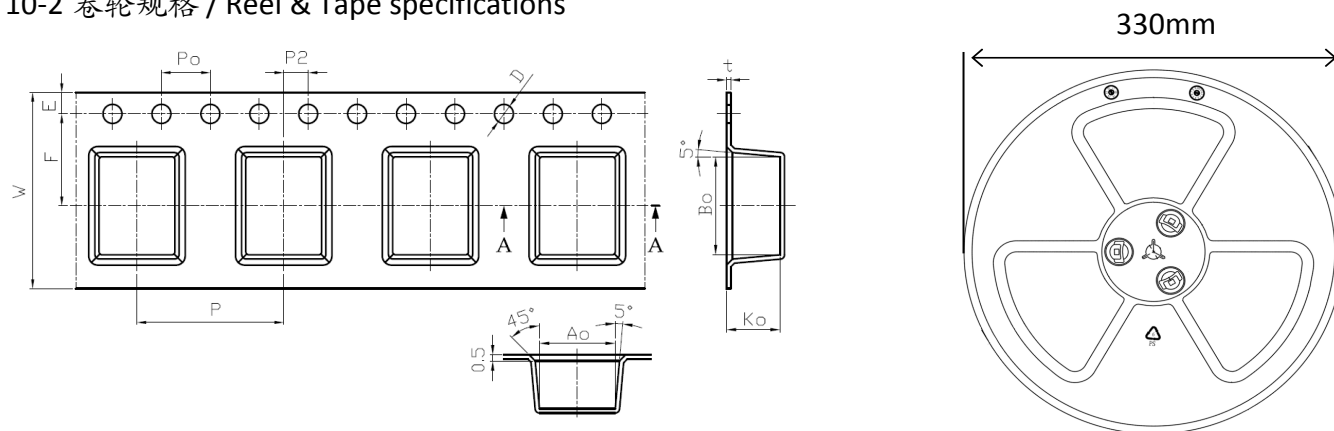
Acceptance Criteria: No permanent arcing, ignition, bursting

10 包装讯息 / PACKING INFORMATION

10-1 包装数量、重量 / QUANTITY & WEIGHT

编码 Part No.	数量 Quantity
MH series	1000pcs/Reel

10-2 卷轮规格 / Reel & Tape specifications



Item	W	P	E	F	P2	D	P0	10P0	A0	B0	K0	t
Criterion	16.00	12.00	1.75	7.50	2.00	1.50	4.00	40.00	6.20	8.00	4.40	0.35
Tolerance	0.30	0.10	0.10	0.10	0.10	0.10	0.10	0.20	0.10	0.10	0.10	0.05
	-0.30	-0.10	-0.10	-0.10	-0.10	0.00	-0.10	-0.20	-0.10	-0.10	-0.10	-0.05

11. 其他 / OTHERS

11-1 如果在使用中有超出本规格书的要求，必须经由双方协商确认。

In the event that an impropriety is found beyond this specification ,it shall be fixed by mutual agreement between the parties.

11-2 如果本规格书有不适当的情况，必须通过双方协商并由本公司修改。

In the event that an impropriety is found in this specification , LANBAO ELECTRICAL APPLIANCES CO. LTD. shall amend it by mutual agreement between the parties.

版次	制作	确认	审核
A1版	赖秋莲 2022/11/22	谢海林 2022/11/22	熊士军 2022/11/22

