



SAMPLE APPROVAL SHEET

DESCRIPTIONS:

- 2.0x1.8x0.8mm SMD LED
- Emitting Color:Green/Blue/Red
- Lens Color:Diffused

CUSTOMER:

MASON P/N: LD-MS-PT2018RGBWIC-40S

CUSTOMER P/N:

CUSTOMER APPROVED PRODUCTION PARAMETER BIN

客户承认产品BIN表

IV/LM 亮度/流明	CCT 色温
WL/XY 波长/区块	Ra 显指
VF 电压	Other 其它

APPROVED BY 审核	CHECKED BY 确认



PRELIMINARY SPEC

2.0x1.8mm SMD CHIP LED

PART NO: LD-MS-PT2018RGBWIC-40S

GREEN
BLUE
RED



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

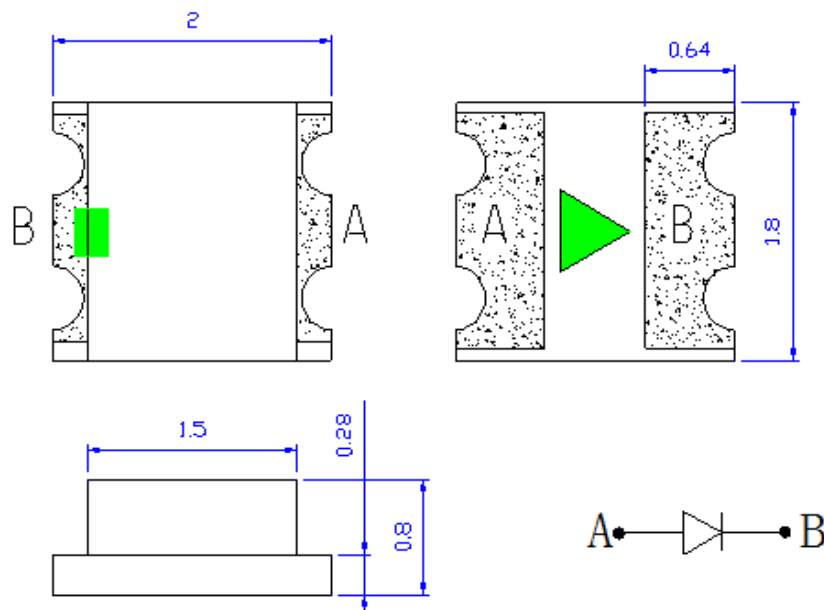
Features

- 2.0mmx1.8mm SMT LED, 0.8mm THICKNESS.
- 本产品为一颗3种颜色 (RGB)七彩效果闪烁的LED
闪烁方式分多段: 单灯渐明渐暗、渐亮渐暗、单闪、双闪等。
- 正输出, 上电长闪。闪烁周期约为40秒, 频度相差 $\pm 20\%$ 。
- PACKAGE : 3000PCS / REEL.
- RoHS COMPLIANT.

Applications

- Automotive: backlighting in dashboard and switch.
- Telecommunication: indicator and back-lighting in telephone and fax.
- Flat backlight for LCD switch and symbol.

Package Dimensions



Notes:

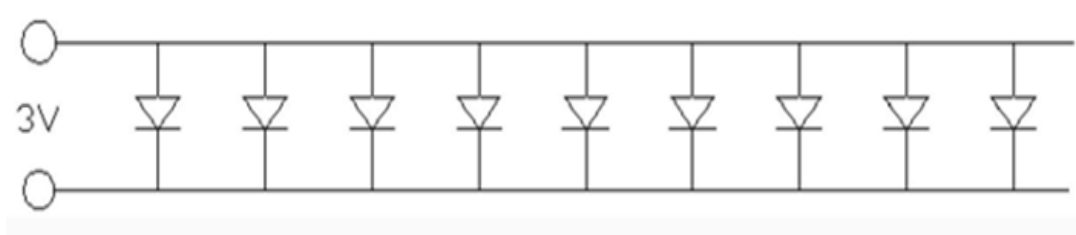
1. All dimensions are in millimeters.
2. Tolerance is ± 0.15 unless otherwise noted.
3. Specifications are subject to change without notice.



(1) 电气规格 Electrical specification (VDD=3V, TA=25°C unless otherwise specified)

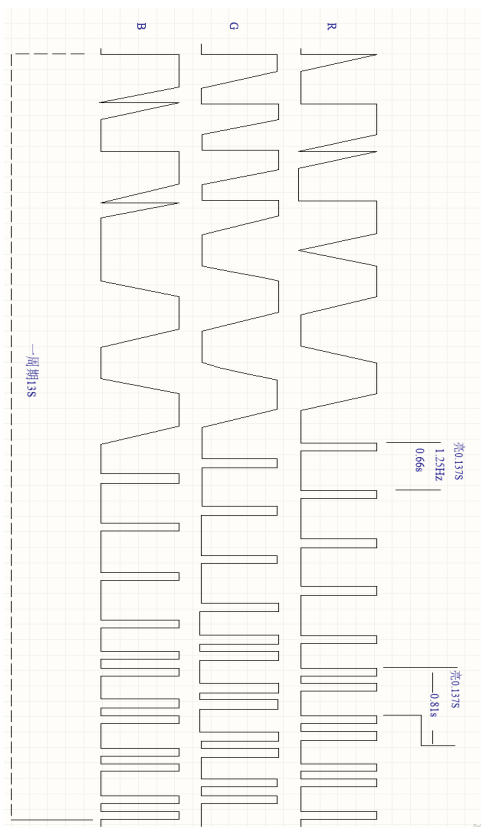
Characteristic	Symbol	Min.	Typ.	Max.	Unit	Remarks
工作电压 Operating Voltage	VDD	2.0	3.0	3.5	V	
工作电流 Operating Current	IDD	-	0.1	0.2	mA	No load
推动电流 Driving Current	IOL	-	25	-	mA	@VDS=1.0V
工作温度 Operating Temperature	Temp.	0	25	60	°C	

(2) 推荐焊接方式 Recommended welding method



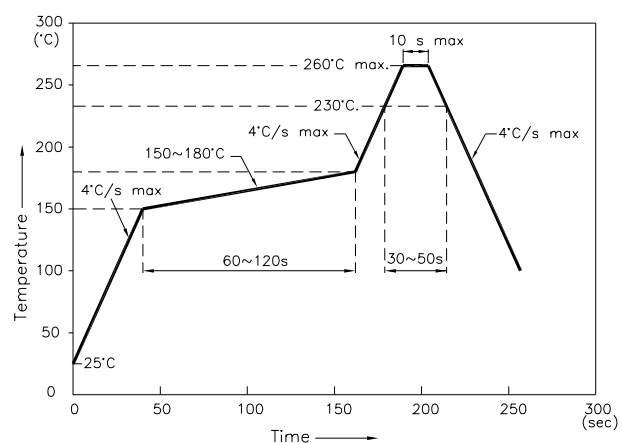
此型号不能串联使用，否则会出现闪烁混乱

波形图



Soldering Profile

Reflow Soldering Profile For Lead-free SMT Process.



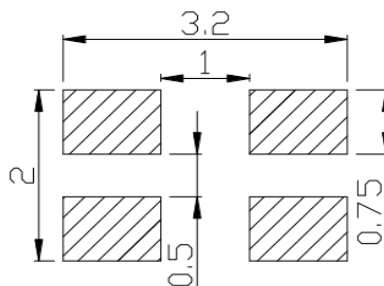
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.



◆ Recommended soldering pattern

(Units:mm)

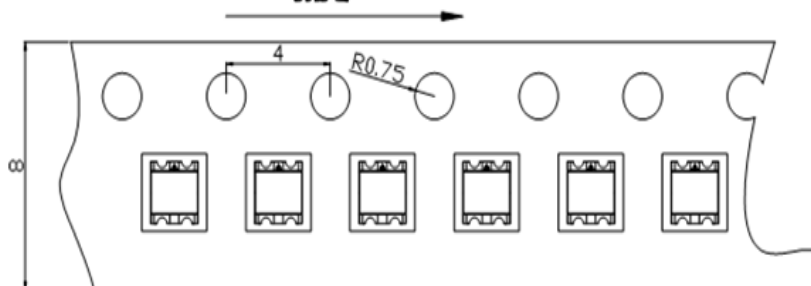


◆ Tape specifications

(Units:mm)

包装方式:

TAPE



Package: 3000 pcs/reel

◆ CAUTIONS:

1.Storage

储存

- Storage condition before opening the package: 5°C~30°C, the largest percentage relative humidity is 60% and the storage period is six month. The LEDs beyond the storage period just can be used after dealing as step 4.
- After opening the package, If the LEDs will be Infrared reflow soldering, Oxygen phase reflow soldering or any other welding.
 - a. must be welding within 24 hours.
 - b. the storage humidity must be below 30% .
- If the situation does not satisfy 2a or 2b, the LEDs must be roasted.
- If the LEDs need to be roasted, the roast temperature should be 60°C +/-3 and the roast time should be 24 hours.
- 未拆封前的储存条件: 5°C~30°C, 最大相对湿度60%, 储存时间6个月, 超过6个月的LED按步骤4处理后才能正常使用。
- 袋子开封后, 元件若将进行红外线回焊、氧相回焊或类似的焊接处理, 必须在
 - a. 24小时内完成焊接工作。
 - b. 储存湿度低于30% 。
- 假如不符合2a或2b的条件, 则元件必须烘烤。
- 若元件须烘烤, 烘烤条件为: 60°C ±3, 24小时。



2.ESD (Electrostatic Discharge)

静电

Static Electricity or power surge will damage the LED.

The following procedures may decrease the possibility of ESD damage.

- All production machinery and test instruments must be electrically grounded.
- Use a conductive wrist band or anti-electrostatic glove when handling these LEDs.
- Maintain a humidity level of 50% or higher in production areas.
- Use anti-static packaging for transport and storage.

静电和电涌会对LED造成损毁。

下列方式有减少静电危害的可能性。

- 所有生产机械和测试设备必须接地。
- 操作LED灯时，需佩戴防静电手环或防静电手套。
- 在生产车间维持湿度等级在50%或以上。
- 运输和储存需用抗静电袋包装。

3.Cleaning

清洗

- Led should be cleaned in a normal temperature and the time for cleaning should be less than 3 minutes ; please use Alcohol as cleaner ,before you use other cleaning solvent ,please make sure that the cleaner will not make any damage to the LED performance or the appearance .
- Ultrasonic Cleaning is also commonly used for cleaning LED , please verify the Ultrasonic cleaning 's Power and time to avoid any damage to the LED .
- The recommended solvent for cleaning:
- LED的清洗推荐在常温下进行且清洗时间不超过3分钟，建议优先选用酒精做为清洗剂，在选用其他溶剂清洗前请先确认不会对LED封装性能或外观造成损伤。
- 超声波清洗也是常用的有效方法，在进行大批量清洗前请先验证超声波清洗的功率及时间是否会对LED造成损伤。
- 推荐的溶剂:

Common cleaning solvent 常用清洁溶剂	Disable cleaning solvent 禁用清洁溶剂
Alcohol 酒精	Thinner、Acetone、Two fluorine resin 、 Acetone b dilute 稀释剂、丙酮、 二氟脂、三氯乙稀

Revision History:

Rev. No.	Change description	Date	Prepared by	Checked by	Approved by
A/0	New-made specification	2017/07/15		余 明	