

**ARKLED** 无锡市方舟科技电子有限公司

WUXI ARK TECHNOLOGY ELECTRONIC CO., LTD

# 规格(承认)书

Specification for approval

※ 方舟 P/N (ARKLED P/N): SM811801G3

※ 客户 P/N (CUSTOMER P/N): \_\_\_\_\_

※ 产品说明 (DESCRIPTION):

1、

2、

3、

※ 日期 (DATE): 2011 年 10 月 20 日

地址: 江苏省宜兴市张渚镇金张渚工业区宇龙路 6 号

ADD: NO.6 Yulong Road, ZHANGZHU TOWN, YIXING CITY, JIANGSU PROVINCE,  
P.R.CHINA

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网址(http) : [www.arkch.com](http://www.arkch.com)

型号 Type :

SM811801G3



■ 产品特征 FEATURES:

- 高可靠性和高稳定性

**High intensity and reliability**

- 高品质、和低功耗、低成本

**High quality, Low power requirement and low cost**

- IC 易兼容、易装配

**IC compatible , Easy assembly**

- 符合 RoHS 指令要求

**Meet RoHS EU Directive**

- 静电承受能力 200V

**ESD 200V**

■ 产品描述 DESCRIPTION:

- 1.8 英寸单位数码管

**1.8 Inch Single Digits Display**

- 极性共阳

**Common Anode**

- 黑面, 白胶

**Black face, white segment**

- 发光颜色

**Lighting Color:**

1、绿色 Green

2、

3、

4、

5、

- 晶片材质

**Chips Materials**

1、InGaN

2、

3、

4、

5、

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■ 产品最大绝对参数值 (Ta: 25°C) ABSOLUTE MAXIMUM RATINGS AT Ta=25°C:

| PARAMETER<br>项目                                                                                 | SYMBOL<br>符号 | Green<br>绿色   | UNIT<br>单位 |
|-------------------------------------------------------------------------------------------------|--------------|---------------|------------|
| Power Dissipation Per Segment<br>功耗                                                             | PAD          | 70            | mw         |
| Reverse Voltage Per Segment<br>反向耐压                                                             | VR           | 5             | V          |
| Continuous Forward Current Per Segment<br>最大使用电流                                                | IAF          | 20            | mA         |
| Peak Forward Current Per Segment(Duty-0.1,1KHz)<br>最大峰值电流                                       | IPF          | 100           | mA         |
| Operating Temperature Range<br>工作温度                                                             | TOPr         | -20°C to 80°C |            |
| Storage Temperature Range<br>贮藏温度                                                               | Tstg         | -30°C to 85°C |            |
| Lead Soldering Temperature 260°C at 1.6mm From Body for 3 second<br>焊接温度 260°C/3秒 距离胶体 1.6mm 以上 |              |               |            |

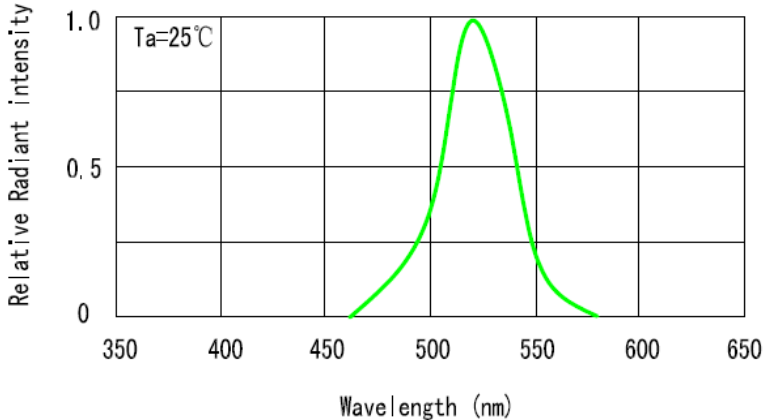
■ 产品光电参数值 (Ta: 25°C) ELECTRICAL/OPTICAL CHARACTERISTICS AT Ta=25°C:

| PARAMETER<br>项目                           | SYMBOL<br>符号 | TEST<br>CONDITION<br>测试条件 | Color<br>颜色 | MIN<br>最小值 | TYP<br>标准值 | MAX<br>最大值 | UNIT<br>单位 |
|-------------------------------------------|--------------|---------------------------|-------------|------------|------------|------------|------------|
| Forward Voltage ,Per Segment<br>正向压降      | VF           | IF=20mA                   | 绿色<br>GREEN | 9          | 9.6        | 10.5       | V          |
|                                           |              |                           |             | 小数点<br>3   | 3.2        | 3.5        |            |
| Reverse Current ,<br>Per Segment<br>反向漏电流 | IR           | VR=5V                     | 绿色<br>GREEN |            |            | 50         | µA         |
| Peak Emission<br>Wavelength<br>峰值波长       | λp           | IF=20mA                   | 绿色<br>GREEN | 512.5      |            | 515        | nm         |
| Luminous Intensity<br>Per Segment<br>法向光强 | IV           | IF=20mA                   | 绿色<br>GREEN | 200        | 250        | 300        | mcd        |

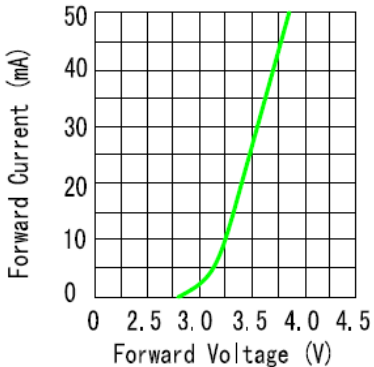
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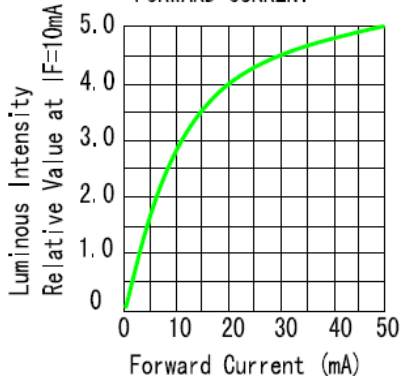
RELATIVE INTENSITY VS. WAVELENGTH



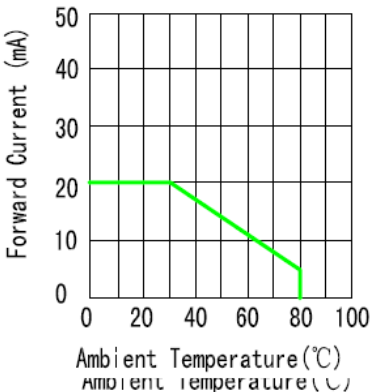
FORWARD CURRENT VS. FORWARD VOLTAGE



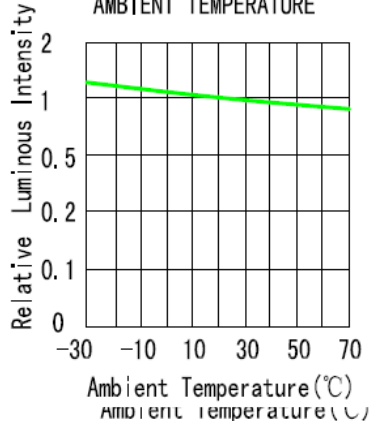
LUMINOUS INTENSITY VS. FORWARD CURRENT



ALLOWABLE FORWARD CURRENT VS. AMBIENT TEMPERATURE

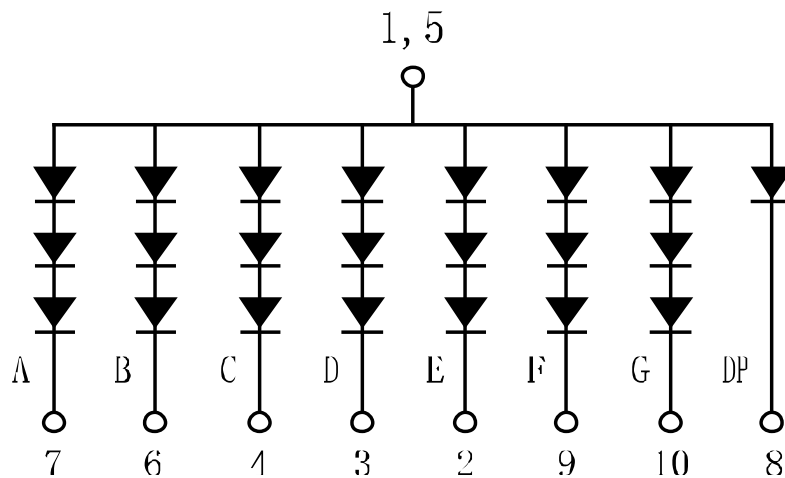
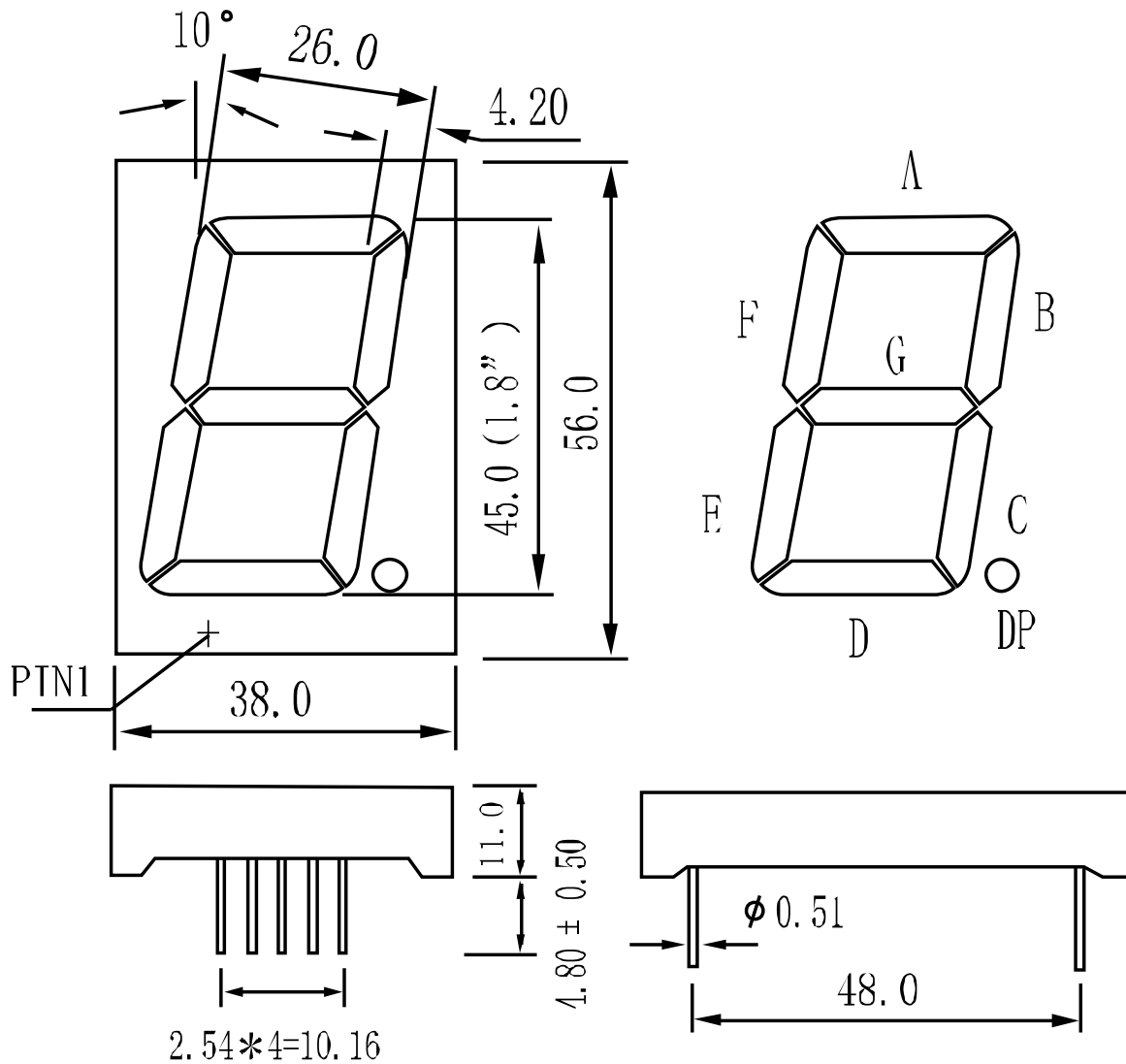


LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE



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NOTES : 1. All dimensions are in millimeters. (inches)

2. Tolerance is  $\pm 0.25(0.010)$  unless otherwise specified.