



深圳市芯斯美电子有限公司
shenzhen xsm electronics co.,ltd

规 格 书

Specifications

| | |
|----------------------|---|
| 品名 Name | 1 位数码管 1 Digit Seven Segments LED Display |
| 型号 Model | XSM-S3013A (共阴 Share Cathode) |
| | XSM-S3013B (共阳 Share Anode) |
| 发光颜色 Color | 红-R 超亮红-SR 黄绿-G 黄-Y 蓝-B 翠绿-PG 白-W Red-R, Super Red-SR, Yellow Green-G, Yellow-Y, Blue-B, Pure Green-PG, White-W |
| 8 字高度 “8” Height | 0.3 英寸 7.62mm 0.3inch, 7.62mm |
| 总芯片数 Total LED Chips | 8 |
| 表面颜色 Cover Color | 黑色 Black |
| 胶体颜色 Colloid Color | 乳白/红 Ivory/Red |
| 备注 Remark | |

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一.特性描述 (Characteristics)

★★★ 能在低电压、小电流条件下驱动发光

Lower working voltage and current

★★★ 发光响应时间极短(<0.1 μ s),高频特性好,单色性好,亮度高

Lighting answering Time <0.1 μ s, better high frequency, chromaticity uniformity, high brightness.

★★★ 体积小,重量轻,抗冲击性能好. 固态封装, 封装方式为灌胶型,稳定性高

Smaller volume, lighter weight, better impact resistance, solid sealing, good steady.

★★★ 寿命长,使用寿命在 5 万小时以上

Long life for 50,000 hours.

★★★ 可连续扫描驱动各字节

Keep scaning and drivering every segment continuously.

★★★ 良好的显示效果、视角宽

Better showeffect and wider visual angle.

★★★ 推荐恒流使用,恒压会出现亮度不均匀现象

Recommend constant current driver.

★★★ 表面有保护膜的产品,可以在使用前撕下来

Protective coating, and rip off when using.

★★★ 焊接温度: 260°C 停留时间最长 5 秒

Solder temperature: 260°C, and stay time less than 5 seconds.

★★★ 当工作温度高于 25°C 时,Ifm,ifp 和 Id 必须降低;电流降低率是-0.36mA/°C(直流驱动),或-0.86mA/°C (脉冲驱动)功耗率是-0.75mW/°C。产品的工作电流不能大于对应工作温度条件 Ifm 或 Ifp 的 60%。

For operation above 25°C,The Ifm Ifp & Pd must be derated,the Current derating is -0.36mA/°C for DC drive and -0.86mA/°C for pulse drive,the power dissipation is -0.75mW/°C.The product working current must not more than the 60% of the Ifm or Ifp according to the working temperature.

★★★ 蓝色,翠绿色,白色请采取防静电措施

Electrostatic prevention for Blue, Pure Green and White ones.

二. 极限参数 (Limited Parameters)

| 参数 Parameters | 符号 Symbol | 极限参数 Limited parameter |
|----------------------------------|-----------|------------------------|
| 脉冲电流 Peak Forward Current | Ifp | 100mA |
| 正向流电流 Continuous Forward Current | If | 20 mA |
| 反向电压 Reverse Voltage | Vr | 5V |
| 工作温度 Operating temperature Range | Topr | -30 to +70°C |
| 储存温度 Storage temperature Range | Tstg | -40 to +85°C |

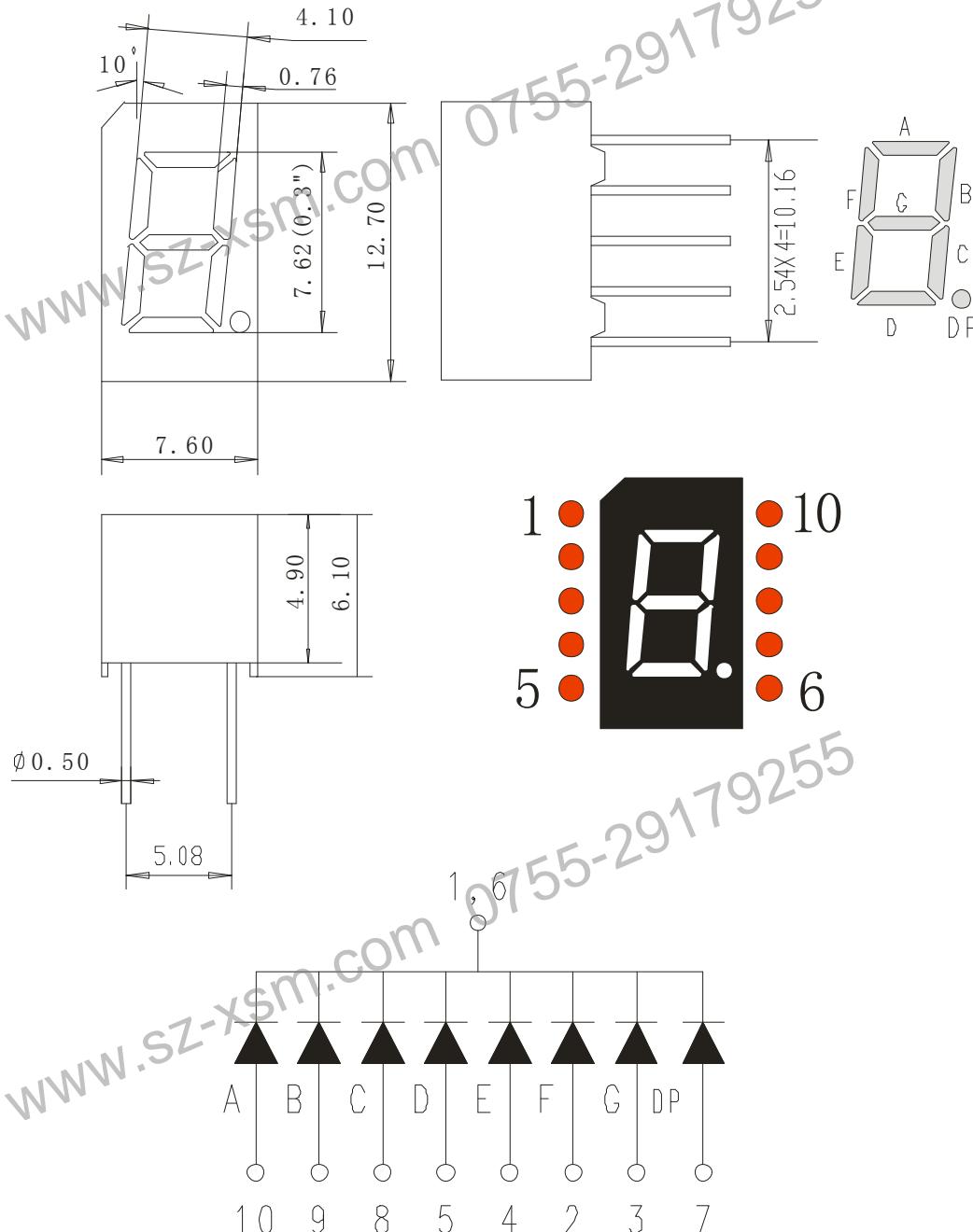
三. 光电参数 (Photoelectric Parameters)

| 参数 Parameter | 正向电压 Forward voltage | | 反向电流 Reverse current | | 发光强度 Luminous Intensity | 波长 Wavelength | 功耗 Power consumption |
|--------------------|----------------------|---------|----------------------|---------|-------------------------|---------------|----------------------|
| 符号 Name | VF | | IR | | IV | λ p | Pt |
| 单位 Unit | V | | uA | | mcd | nm | mW |
| 条件 Condition | IF=20 mA | | VR=5V | | IF=20mA | IF=20mA | IF=20mA |
| | 平均 Arrange | 最大 Max. | 平均 Arrange | 最大 Max. | 平均 Arrange | 平均 Arrange | 平均 Arrange |
| 高亮红 High red R | 2 | 2.4 | -- | 20 | 11 | 635 | 36 |
| 超高亮红 super red SR | 2.2 | 2.6 | -- | 20 | 80 | 620 | 40 |
| 黄绿色 Yellow green G | 2.2 | 2.6 | -- | 20 | 11 | 571 | 44 |
| 黄色 Yellow Y | 2.1 | 2.5 | -- | 20 | 85 | 590 | 42 |
| 蓝色 Blue B | 3.3 | 4 | -- | 20 | 12 | 465 | 66 |
| 翠绿色 Pure green PG | 3.3 | 4 | -- | 20 | 220 | 515 | 66 |
| 白色 White W | 3.3 | 4 | -- | 20 | -- | -- | 66 |

四. 外形尺寸及电路原理图: 7.60mm×12.70mm×6.10mm

Figure Size & Circuit Principle Diagram: 7.60mm×12.70mm×6.10mm

3013A



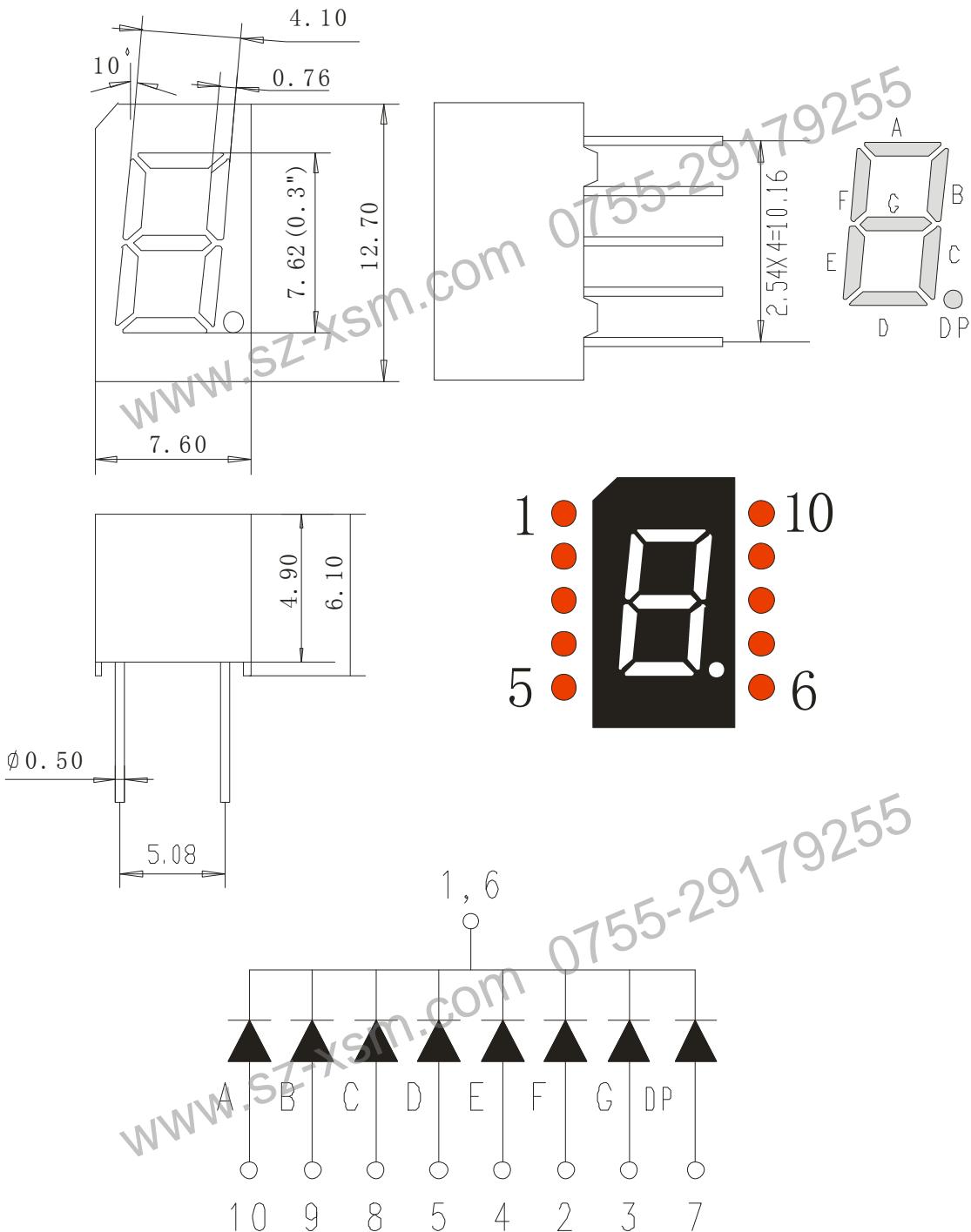
段驱动电压为: 正向电压×1

Segment driver voltage: VF value x 1

小数点驱动电压为: 正向电压×1 不同颜色的正向电压值不同,详见第二页光电参数表.

Decimal driver voltage: VF value x 1, different colors with different forward voltage, please refer to Photoelectric Parameters.

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段驱动电压为：正向电压×1

Segment driver voltage: VF value x 1

小数点驱动电压为：正向电压×1 不同颜色的正向电压值不同,详见第二页光电参数表.

Decimal driver voltage: VF value x 1, different colors with different forward voltage, please refer to Photoelectric Parameters.