

# 规格(承认)书

## Specification for approval

※ 方舟 P/N (ARKLED P/N): SM420501/SM410501

※ 客户 P/N (CUSTOMER P/N): \_\_\_\_\_

※ 产品说明 (DESCRIPTION):

1. 0.5 inch (12.7mm) Digit Height
2. Single Digit Numeric LED Display
3. Ultra Brightness Red

※ 日期 (DATE): 2012-4-23

地址: 江苏省宜兴市张渚镇金张渚工业区宇龙路6号

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

**Ningbo Branch:**

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E-mial: **ark@arkled.net**

传真 (FAX): **0086-574-86308392**

网址(http) : **www.arkled.net**

0.5 Inch Numeric LED Display  
Part No: SM420501, SM410501



## FEATURES

- High intensity and reliability
- High quality, Low power requirement and low cost
- IC compatible, Easy assembly
- Meet RoHS EU Directive

## DESCRIPTION

- The device of this 0.5 inch numeric LED display is made of 4 elements (AlGaInP) material, designed for viewing distance up to 7 meters.
- It can be used in audio equipment, instruments, numeric read out display and so on.
- Standard appearance color is black or grey face and white segment.

## Selection Guide

Part No. CC <sup>[1]</sup>	Part No. CA <sup>[2]</sup>	Dice	Iv(mcd) <sup>[3]</sup> @20mA	
			Min.	Typ.
SM420501	SM410501	Ultra Bright Red (AlGaInP)	17	50

Note:

1. CC is Common Cathode.
2. CA is Common Anode.
3. Luminous intensity/ luminous Flux: +/-15%.

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**ABSOLUTE MAXIMUM RATINGS AT Ta=25°C**

PARAMETER	SYMBOL	ULTRA-BRIGHT RED	UNIT
Power Dissipation Per Segment	PAD	100	mw
Reverse Voltage Per Segment	VR	5	V
Continuous Forward Current Per Segment	IAF	30	mA
Peak Forward Current Per Segment(Duty-0.1,1KHz)	IPF	200	mA
Operating Temperature Range	TOPr	-20°C to 80°C	
Storage Temperature Range	Tstg	-30°C to 85°C	
Lead Soldering Temperature 260°C at 1.6mm From Body for 3 second			

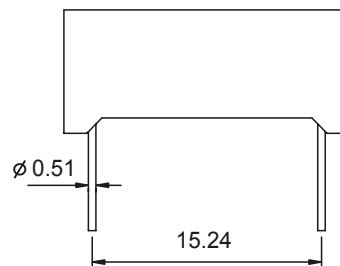
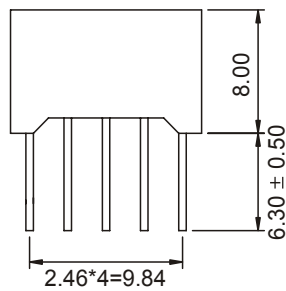
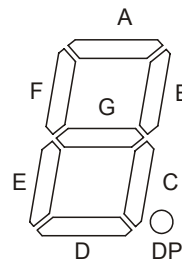
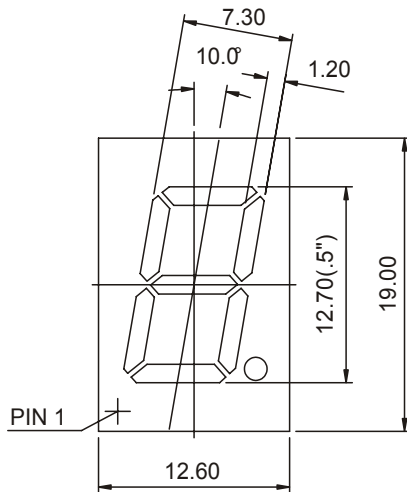
**ELECTRICAL/OPTICAL CHARACTERISTICS AT Ta=25°C**

PARAMETER	SYMBOL	TEST CONDITION	Color	TYP	MAX	UNIT
Forward Voltage ,Per Segment	VF	IF=20mA	ULTRA-BRIGHT RED	1.9	2.6	V
Reverse Current , Per Segment	IR	VR=5V	ULTRA-BRIGHT RED		50	μA
Peak Emission Wavelength	λp	IF=20mA	ULTRA-BRIGHT RED	640		nm

0.5 Inch Numeric LED Display  
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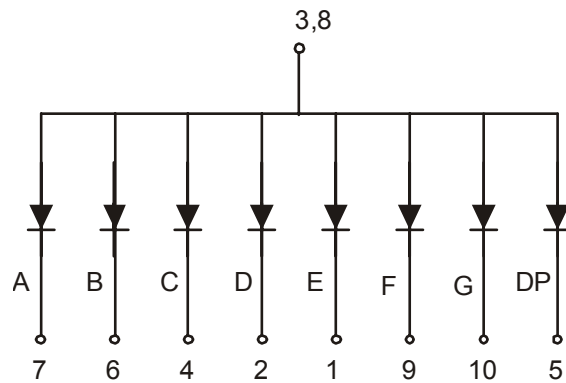
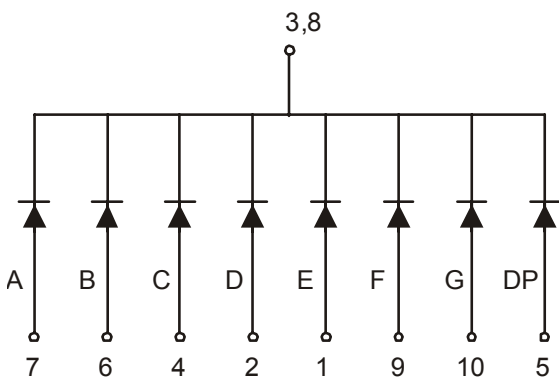


**Package Dimensions and Internal Circuit Diagram**



**SM20501**

**SM10501**



NOTES: 1. all dimensions are in millimeters. (Inches)  
 2. Tolerance is  $\pm 0.25(0.010\text{'})$  unless otherwise specified.



## Typical Electrical-Optical Characteristics Curves

