

规格(承认)书

Specification for approval

※ 方舟 P/N (ARKLED P/N): SM022301/SM012301

※ 客户 P/N (CUSTOMER P/N): _____

※ 产品说明 (DESCRIPTION):

1. 2.3 inch (56.8mm) Digit Height
2. Single Digit Numeric LED Display
3. Ultra Brightness Red and Ultra Brightness Green

※ 日期 (DATE): 2012-5-22

地址: 江苏省宜兴市张渚镇金张渚工业区纬二路 2 号

FACTORY ADD: NO.2 Wei er Road, ZHANGZHU TOWN, YIXING CITY, JIANGSU PROVINCE, P.R.CHINA

Ningbo Branch:

电话 (TEL): **0086-574-86308393**

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

传真 (FAX): **0086-574-86308392**

网址(http) : **www.arkled.net**

2.3 Inch Numeric LED Display
Part No: SM022301, SM012301



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 2.3 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 ^[1]	Part No. CA ^[2]	Dice	Iv(mcd) ^[3] @20mA	
			Min.Seg(DP)	Typ.Seg(DP)
SM022301	SM012301	Ultra Bright Red (AlGaInP)	90(45)	135(68)
		Ultra Bright Green (AlGaInP)		

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	ULTRA-BRIGHT Green	UNIT
Power Dissipation Per Seg	PAD	240	300	mw
Power Dissipation Per DP		120	150	
Reverse Voltage Per Seg, DP	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

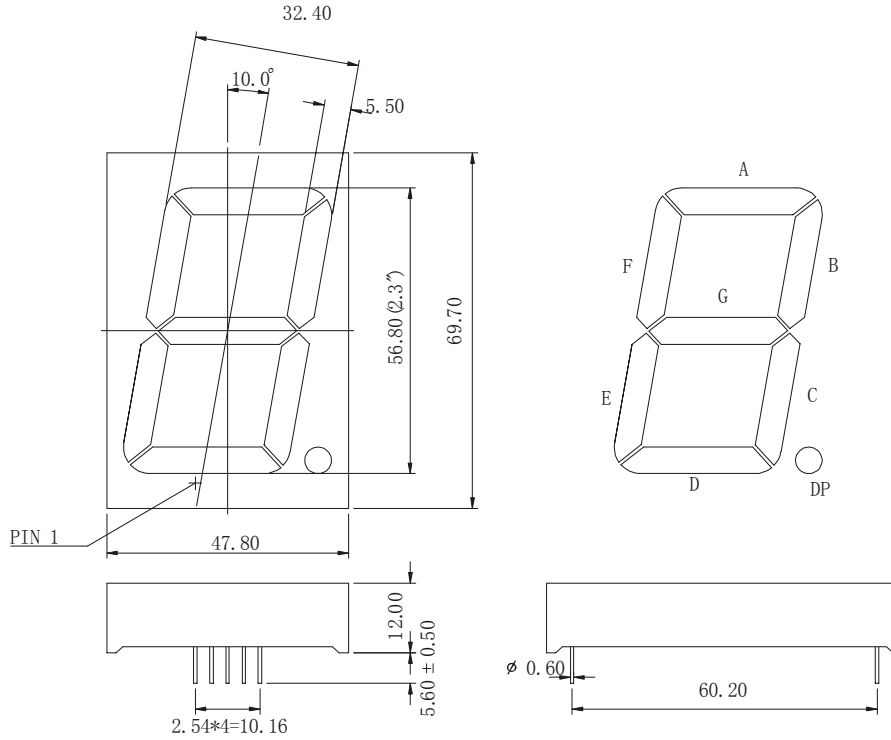
PARAMETER	SYMBOL	TEST CONDITION	Color	TYP. Per Seg(DP)	MAX. Per Seg(DP)	UNIT
Forward Voltage	VF	IF=20mA	ULTRA-BRIGHT RED	7.6(3.8)	10.4(5.2)	V
			ULTRA-BRIGHT Green	8.4(4.2)	10.4(5.2)	
Reverse Current	IR	VR=5V	ULTRA-BRIGHT RED		50	μA
			ULTRA-BRIGHT Green		50	
Peak Emission Wavelength	λp	IF=20mA	ULTRA-BRIGHT RED	640		nm
			ULTRA-BRIGHT Green	565		

2.3 Inch Numeric LED Display

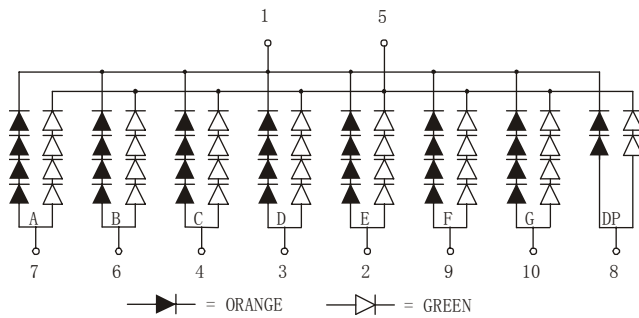
Part No: SM022301, SM012301



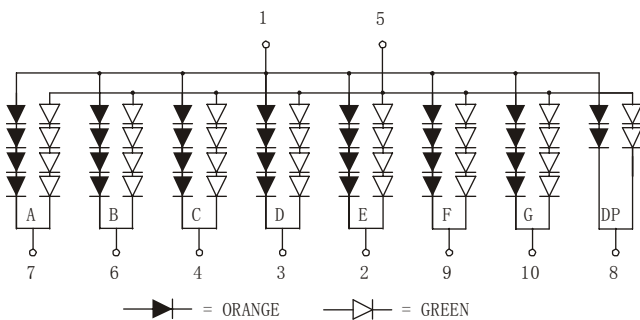
Package Dimensions and Internal Circuit Diagram



SM022301



SM012301



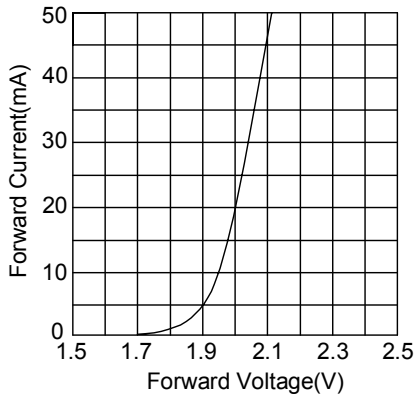
NOTES: 1. all dimensions are in millimeters. (Inches)

2. Tolerance is ± 0.25(0.010") unless otherwise specified.

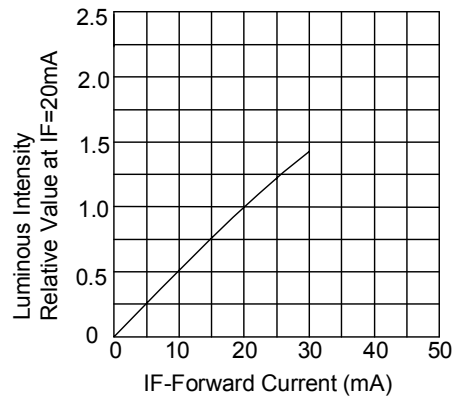


Typical Electrical-Optical Characteristics Curves: Ultra Bright Red

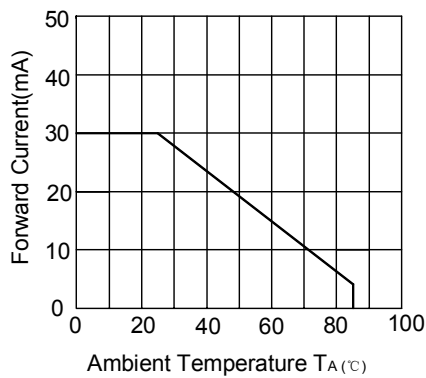
Forward Current Vs Forward Voltage



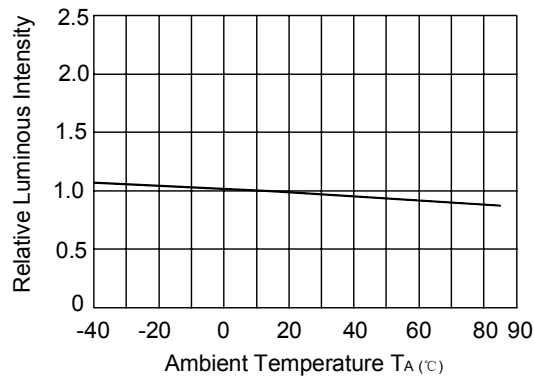
Relative Intensity Vs Forward Current



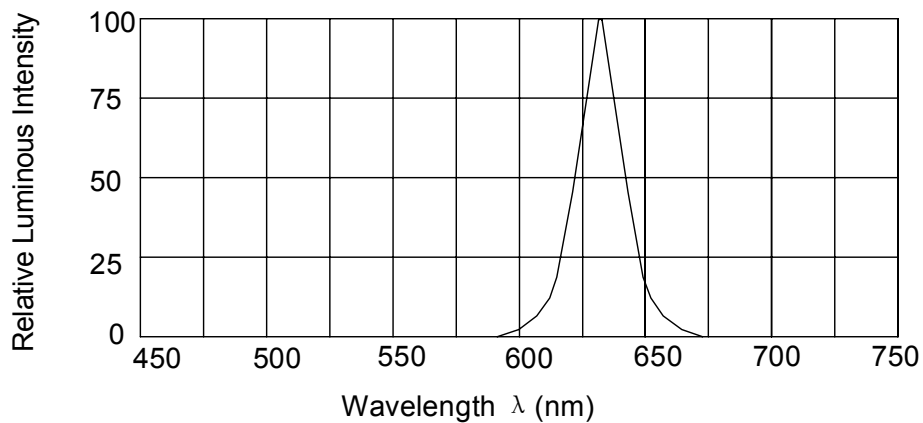
Forward Current Vs Environmental Temp



Relative Intensity Vs Environmental Temp



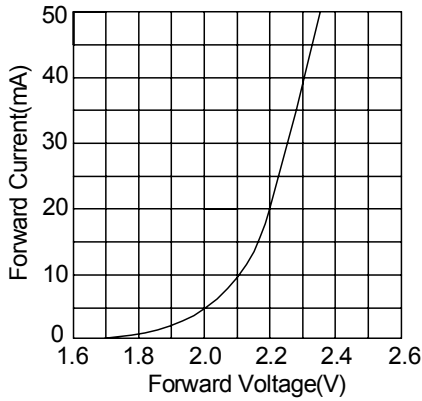
Relative Intensity Vs Wavelength



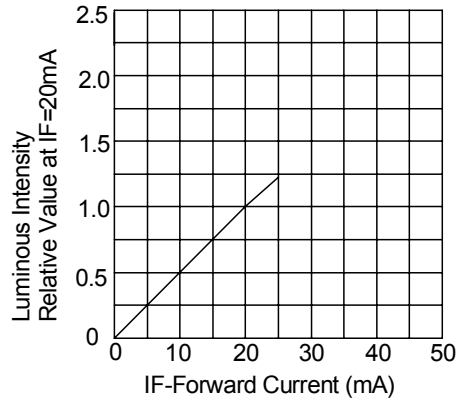


Typical Electrical-Optical Characteristics Curves: Ultra Bright Green

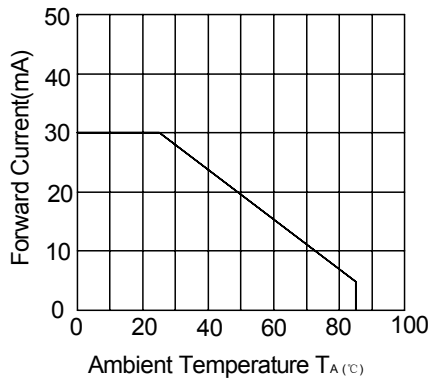
Forward Current Vs Forward Voltage



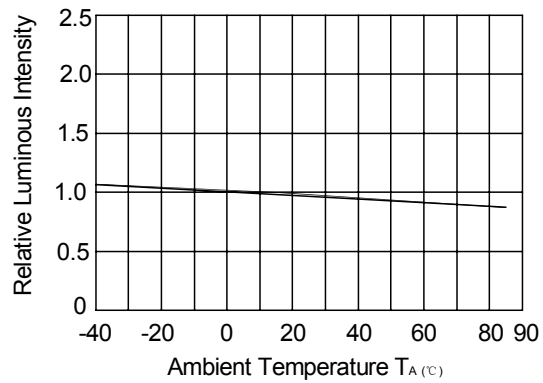
Relative Intensity Vs Forward Current



Forward Current Vs Environmental Temp



Relative Intensity Vs Environmental Temp



Relative Intensity Vs Wavelength

