

# 规格(承认)书

## Specification for approval

※ 方舟 P/N (ARKLED P/N): SN420281/SN410281

※ 客户 P/N (CUSTOMER P/N): \_\_\_\_\_

※ 产品说明 (DESCRIPTION):

1. 0.28 inch (7mm) Digit Height
2. Dual Digits Numeric LED Display
3. Ultra Brightness Red

※ 日期 (DATE): 2012-5-19

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:**

电话 (TEL): **0086-574-86308393**

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

传真 (FAX): **0086-574-86308392**

网址(http) : **www.arkled.net**

0.28 Inch Numeric LED Display

Part No: SN420281, SN410281



## 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 0.28 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.<br>CC <sup>[1]</sup> | Part No.<br>CA <sup>[2]</sup> | Dice                       | Iv(mcd) <sup>[3]</sup> @20mA |      |
|-------------------------------|-------------------------------|----------------------------|------------------------------|------|
|                               |                               |                            | Min.                         | Typ. |
| SN420281                      | SN410281                      | 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**

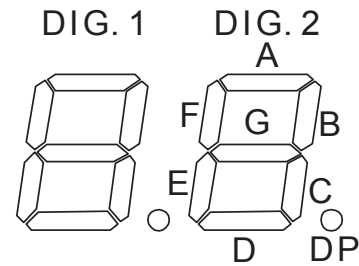
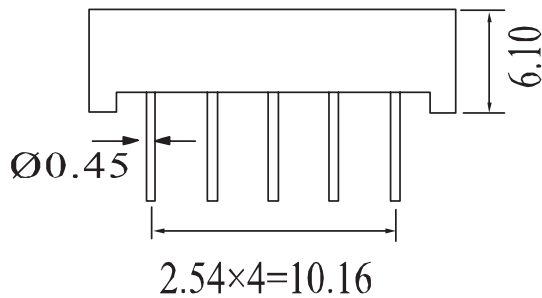
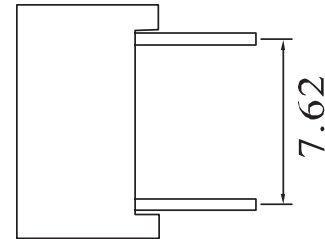
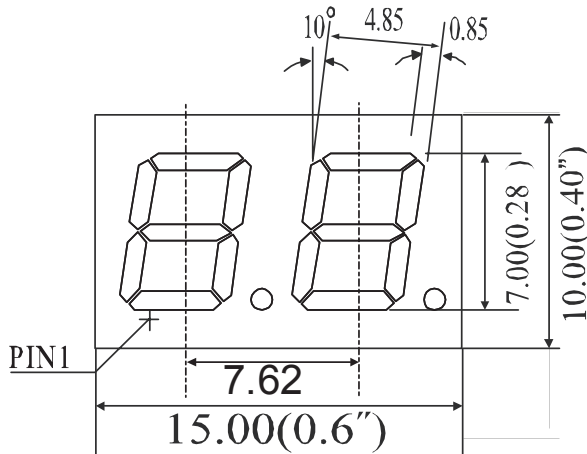
| PARAMETER                     | SYMBOL | TEST CONDITION | Color            | TYP | MAX | UNIT |
|-------------------------------|--------|----------------|------------------|-----|-----|------|
| Forward Voltage ,Per Segment  | VF     | IF=20mA        | ULTRA-BRIGHT RED | 1.9 | 2.6 | V    |
| Reverse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

0.28 Inch Numeric LED Display

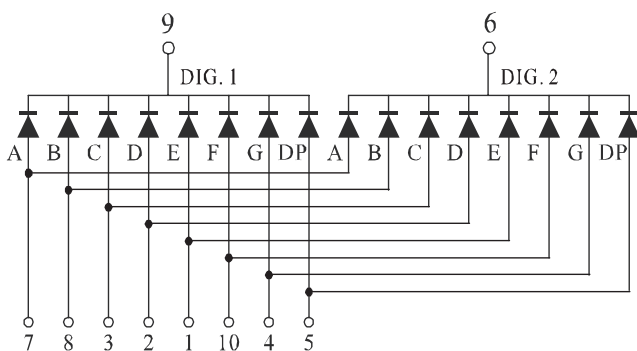
Part No: SN420281, SN410281



### Package Dimensions and Internal Circuit Diagram

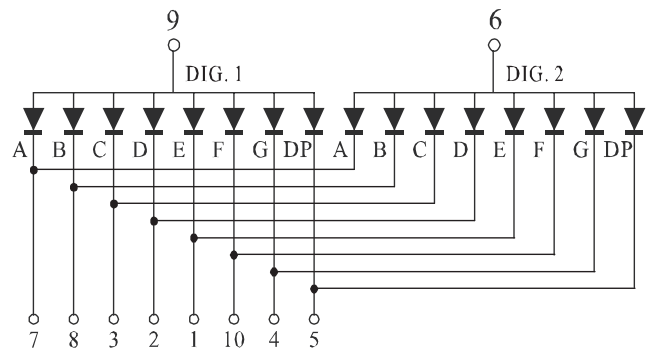


#### SN20281



CODE L1

#### SN10281



CODE I1

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

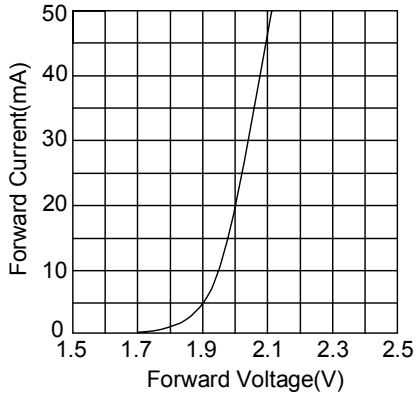
0.28 Inch Numeric LED Display

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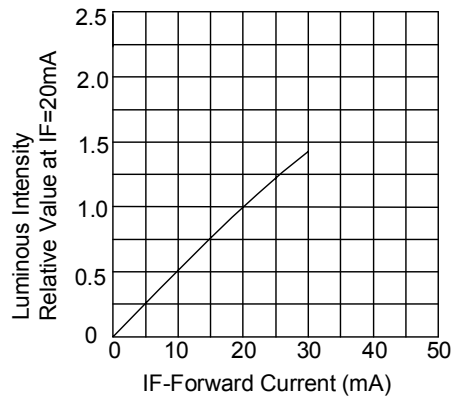


### Typical Electrical-Optical Characteristics Curves

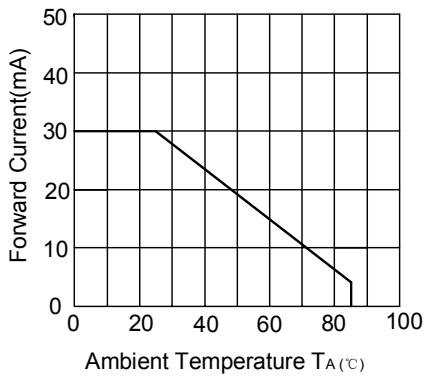
Forward Current Vs Forward Voltage



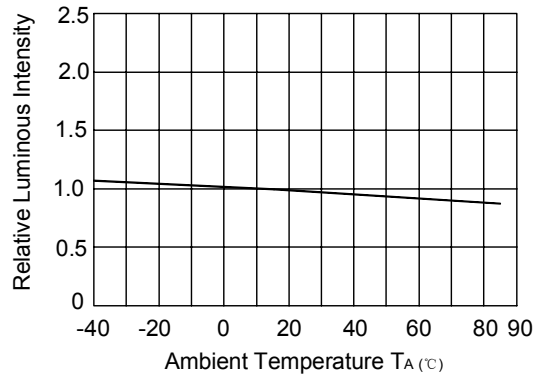
Relative Intensity Vs Forward Current



Forward Current Vs Environmental Temp



Relative Intensity Vs Environmental Temp



Relative Intensity Vs Wavelength

