

SURFACE MOUNT DISPLAY

Part Number: ACDC03-41SRWA-F01

Super Bright Red

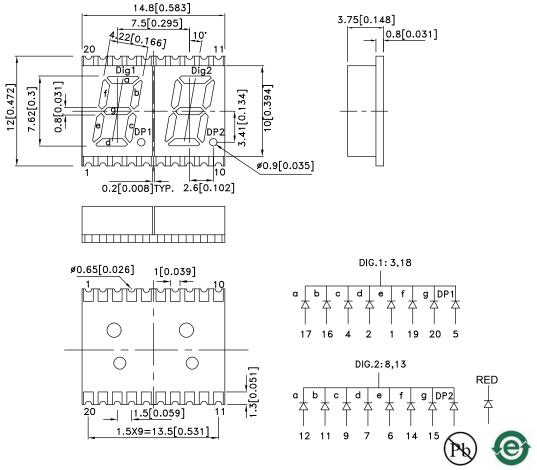
Features

- 0.3 inch digit height.
- Low current operation.
- Excellent character appearance.
- Mechanically rugged.
- Package :300pcs / reel.
- Gray face, white segment.
- Moisture sensitivity level : level 2a.
- RoHS compliant.

Description

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

Package Dimensions& Internal Circuit Diagram



- 1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
- 2. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

 3. The gap between the reflector and PCB shall not exceed 0.25mm.

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Selection Guide

Part No.	lo. Dice Lens Type		lv (ucd) [1] @ 10mA		Description
			Min.	Тур.	
ACDC03-41SRWA-F01	Super Bright Red (GaAlAs)	White Diffused	5600	9800	Common Cathode, Rt. Hand Decimal.
			*1400	*2600	

Note:

- Luminous intensity/ luminous Flux: +/-15%.
 Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	655		nm	I=20mA
λD [1]	Dominant Wavelength	Super Bright Red	640		nm	I=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	IF=20mA
С	Capacitance	Super Bright Red	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Red	1.85	2.5	V	IF=20mA
lr	Reverse Current	Super Bright Red		10	uA	V _R =5V

Notes:

- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.

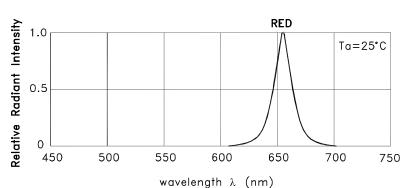
Absolute Maximum Ratings at TA=25°C

Parameter	Super Bright Red	Units	
Power dissipation	75	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	155	mA	
Reverse Voltage	5	V	
Operating / Storage Temperature	-40°C To +85°C		

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

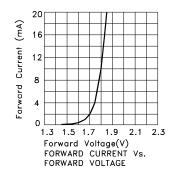
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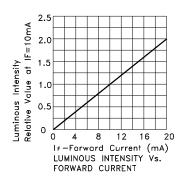


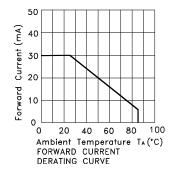
RELATIVE INTENSITY Vs. WAVELENGTH

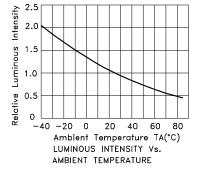
Super Bright Red

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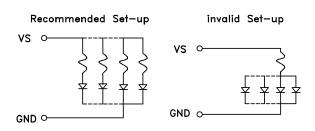






CIRCUIT DESIGN NOTES

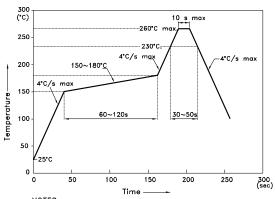
- 1.Protective current—limiting resistors may be necessary to operate the Displays.
- 2.LEDs mounted in parallel should each be placed in series with its own current—limiting resistor.



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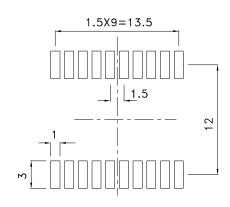
Reflow Soldering Profile For Lead-free SMT Process.

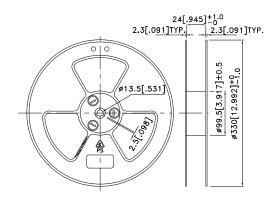


- NOTES: OILS: 1.We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C. 2.Don't cause stress to the epoxy resin while it is exposed to high temperature.
 3.Number of reflow process shall be 2 times or less.

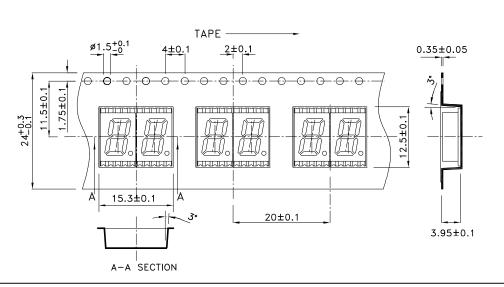
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.15)

Reel Dimension





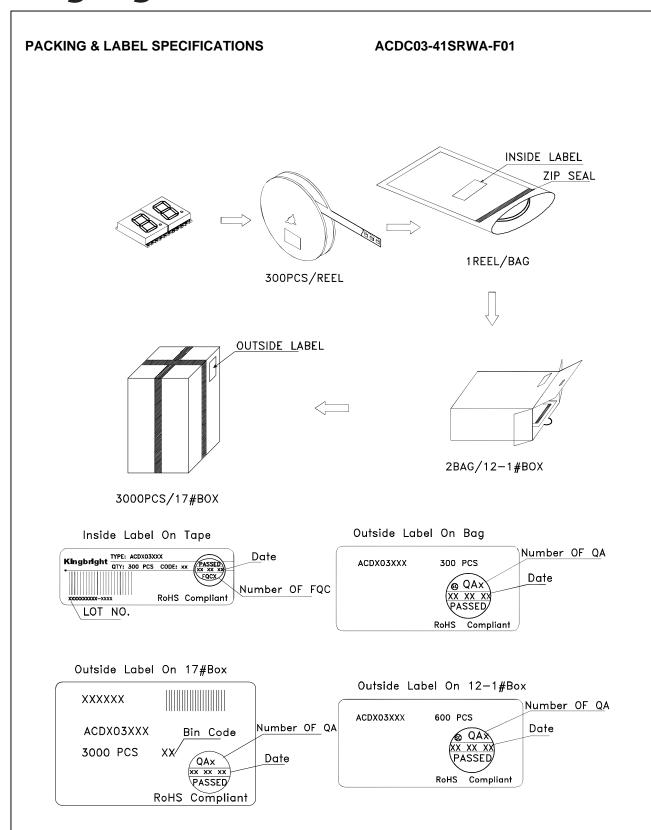
Tape Specifications (Units: mm)



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All design applications should refer to Kingbright application notes available at $\underline{\text{http://www.KingbrightUSA.com/ApplicationNotes}}$

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