

### SURFACE MOUNT DISPLAY

Part Number: ACDC03-41SRWA-F01

Super Bright Red

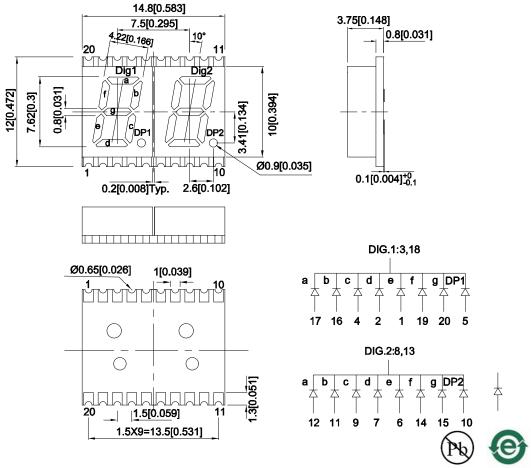
### **Features**

- 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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# **Kingbright**

### **Selection Guide**

	Part No.	Emitting Color (Material)	Lens Type	Iv (ucd) [1] @ 10mA		Description
				Min.	Тур.	
	ACDC02 44CDWA F04	Compan Dright Dad (CaAlAa)	Mileita Difference	5600	9800	Common Cathode, Rt. Hand Decimal.
	ACDC03-41SRWA-F01	Super Bright Red (GaAlAs)	White Diffused	*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	Emitting Color	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	655		nm	IF=10mA
λD [1]	Dominant Wavelength	Super Bright Red	640		nm	IF=10mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	IF=10mA
С	Capacitance	Super Bright Red	45		pF	VF=0V;f=1MHz
VF [2]	Forward Voltage	Super Bright Red	1.8	2.5	V	IF=10mA
lr	Reverse Current	Super Bright Red		10	uA	V <sub>R</sub> =5V

### Notes:

- 1. Wavelength: +/-1nm.
- 2. Forward Voltage: +/-0.1V.
- 3. Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 4. Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

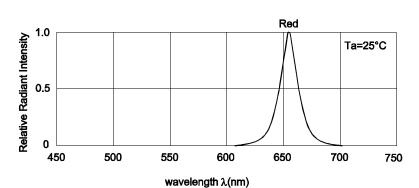
### Absolute Maximum Ratings at TA=25°C

Parameter	Values	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	

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

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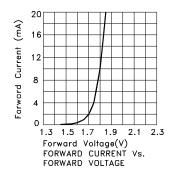
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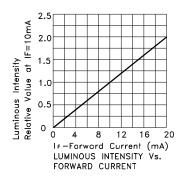


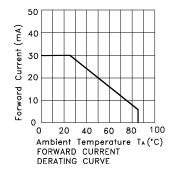
Relative Intensity Vs. Wavelength

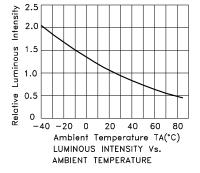
### **Super Bright Red**

### ACDC03-41SRWA-F01



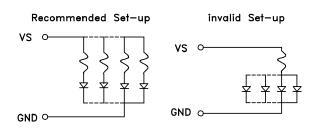






### CIRCUIT DESIGN NOTES

- 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.

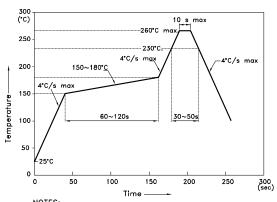


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### ACDC03-41SRWA-F01

Reflow Soldering Profile For Lead-free SMT Process.

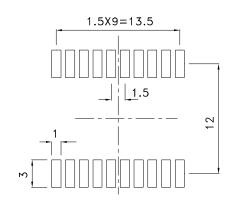


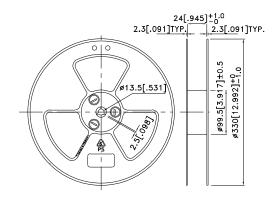
- NOTES:

  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.

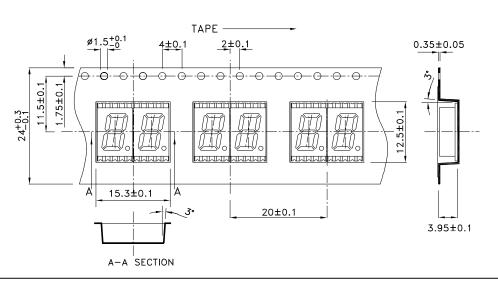
### **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.15)

### **Reel Dimension**





### **Tape Specifications** (Units: mm)



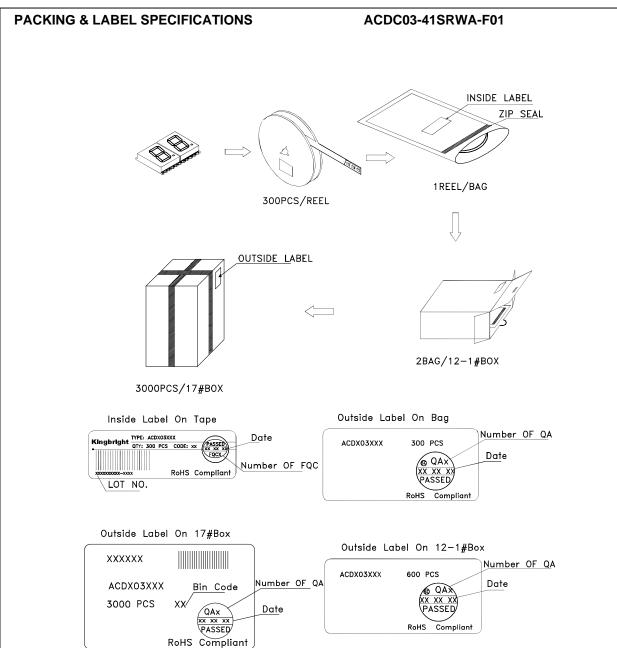
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