

### 3.5x2.8mm SURFACE MOUNT LED LAMP

PRELIMINARY SPEC

Part Number: KA-3528SRCT

Super Bright Red

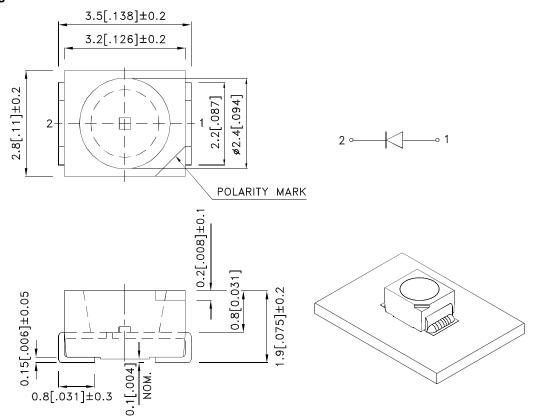
### **Features**

- Single color.
- Suitable for all SMT assembly and solder process.
- Available on tape and reel.
- Ideal for backlighting.
- Package: 1500pcs / reel.
- Moisture sensitivity level : level 4.
- RoHS compliant.

### Description

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

# **Package Dimensions**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- Specifications are subject to change without notice.
   The device has a single mounting surface. The device must be mounted according to the specifications.





SPEC NO: DSAJ6170 **REV NO: V.1** DATE: JUL/24/2009 PAGE: 1 OF 5

APPROVED: WYNEC CHECKED: Allen Liu DRAWN: S.P.Chen

### **Selection Guide**

Part No.	Dice	Lens Type		cd) [2] DmA	Viewing Angle [1]
				Тур.	201/2
KA-3528SRCT	Super Bright Red (GaAlAs)	WATER CLEAR	50	150	120°

#### Notes:

- 1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value. 2. Luminous intensity/ luminous Flux: +/-15%.

# Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	660		nm	IF=20mA
λD [1]	Dominant Wavelength	Super Bright Red	640		nm	IF=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 <sub>R</sub> =5V

### Notes:

- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.

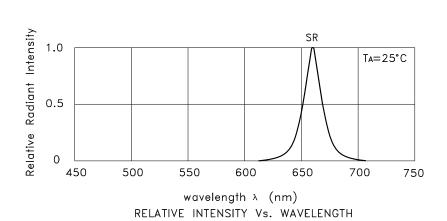
### Absolute Maximum Ratings at TA=25°C

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 Temperature	-40°C To +85°C		
Storage Temperature	-40°C To +85°C		

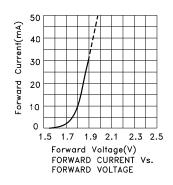
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

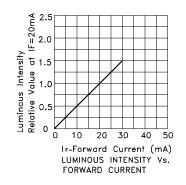
SPEC NO: DSAJ6170 **REV NO: V.1** DATE: JUL/24/2009 PAGE: 2 OF 5

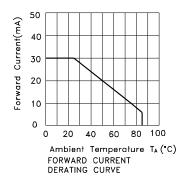
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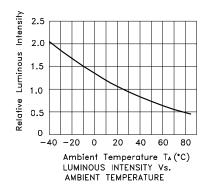


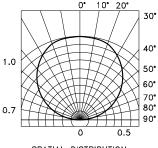
Super Bright Red KA-3528SRCT











SPATIAL DISTRIBUTION

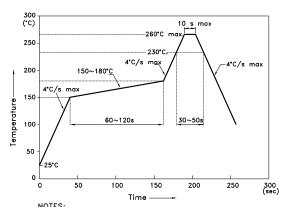
SPEC NO: DSAJ6170 REV NO: V.1 DATE: JUL/24/2009 PAGE: 3 OF 5

APPROVED: WYNEC CHECKED: Allen Liu DRAWN: S.P.Chen

### **KA-3528SRCT**

Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

Reflow Soldering Profile For Lead-free SMT Process.

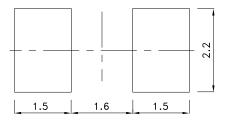


NOTES: 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.

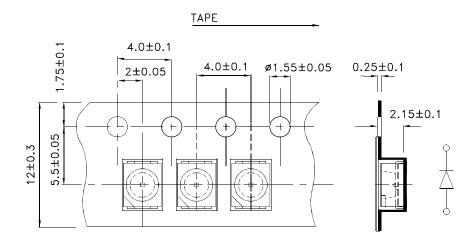
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

3.Number of reflow process shall be 2 times or less.

# **Recommended Soldering Pattern** (Units: mm; Tolerance: ± 0.1)



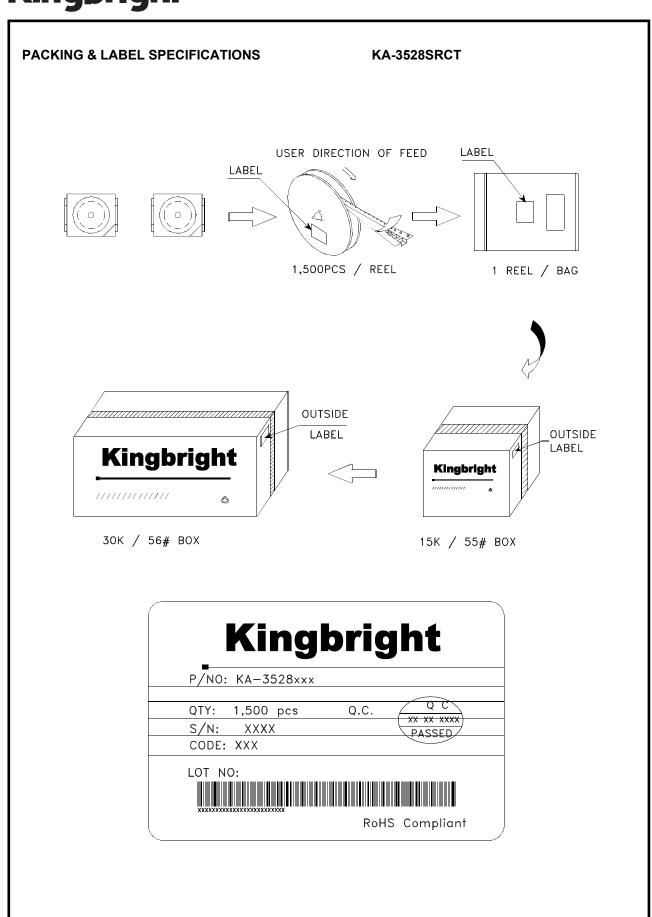
## **Tape Dimensions** (Units: mm)



SPEC NO: DSAJ6170 **REV NO: V.1** DATE: JUL/24/2009 PAGE: 4 OF 5

DRAWN: S.P.Chen

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SPEC NO: DSAJ6170 APPROVED: WYNEC REV NO: V.1 CHECKED: Allen Liu DATE: JUL/24/2009 DRAWN: S.P.Chen PAGE: 5 OF 5