

SUBMINIATURE SOLID STATE LAMP

KM2520SRC03

SUPER BRIGHT RED

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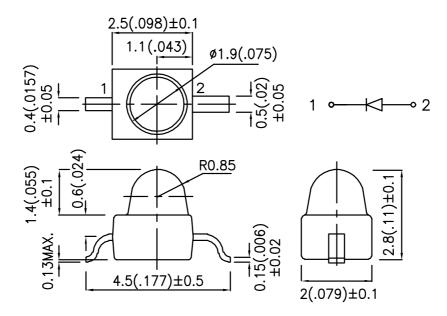
Features

- •SUBMINIA TURE PACKAGE.
- •WIDE VIEWING ANGLE.
- •GULL WING LEAD.
- •LONG LIFE SOLID STATE RELIABILITY.
- •LOW PACKAGE PROFILE.
- •PACKAGE: 1000PCS / REEL.
- •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 ±0.25(0.01") unless otherwise noted.
- Lead spacing is measured where the leads emerge from the package.
 Specifications are subject to change without notice.

SPEC NO: DSAA5392 **REV NO: V.6 DATE: MAR/18/2005** APPROVED: J. Lu CHECKED: Allen Liu DRAWN: B.H.LI

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
KM2520SRC03	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	110	600	20°

Note:

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	Dominant Wavelength	Super Bright Red	640		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	Ir=20mA
С	Capacitance	Super Bright Red	45		pF	VF=0V;f=1MHz
VF	Forward Voltage	Super Bright Red	1.85	2.5	V	IF=20mA
lR	Reverse Current	Super Bright Red		10	uA	VR = 5V

Absolute Maximum Ratings at Ta=25°C

Parameter	Super Bright Red	Units	
Power dissipation	100	mW	
DC Forward Current	30	mA	
Peak Forward Current [1]	155	mA	
Reverse Voltage	5	V	
Operating/Storage Temperature -40°C To +85°C			

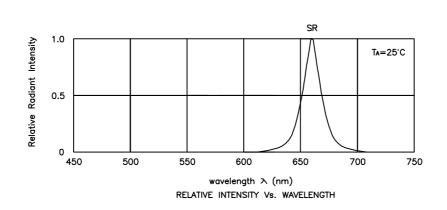
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^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

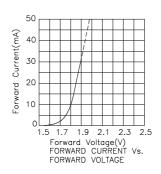
^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

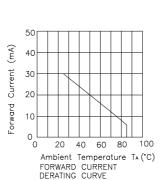
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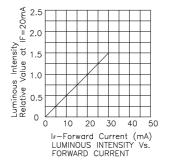


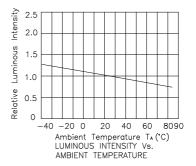
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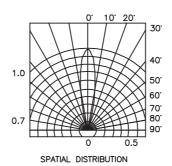








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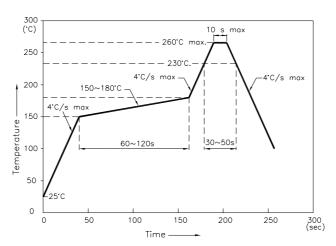
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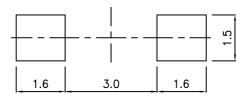
Reflow Soldering Profile For Lead-free SMT Process.



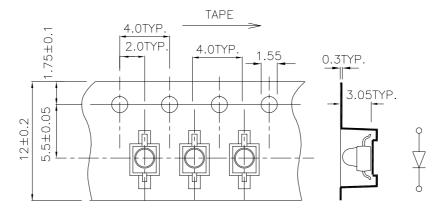
NOTES:

- 1. We recommend the reflow temperature $245^{\circ}C(+/-5^{\circ}C)$. 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)



Tape Specifications (Units: mm)



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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