# **Kingbright**

### 2mmx5mm RECTANGULAR SOLID LAMP

WP103SRDT

SUPER BRIGHT RED

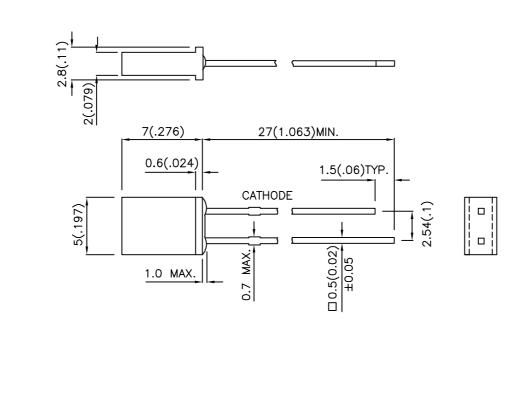
#### **Features**

- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- SUITABLE FOR LEVEL INDICATOR.
- LONG LIFE SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

#### Description

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

#### **Package Dimensions**



- Notes: 1. All dimensions are in millimeters (inches).
- Tolerance is ±0.25(0.01") unless otherwise noted.
  Lead spacing is measured where the leads emerge from the package.

4. Specifications are subject to change without notice.

**REV NO: V.1 CHECKED: Allen Liu**  DATE: APR/19/2005 DRAWN: Y.W.WANG PAGE: 1 OF 3 ERP:1101000399

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Selection Guide	,				
Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 <del>0</del> 1/2
WP103SRDT	SUPER BRIGHT RED (GaAIAs)	RED DIFFUSED	36	80	110°

Note:

1.  $\theta$ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

### Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Super Bright Red	660		nm	I <sub>F</sub> =20mA
λD	Dominant Wavelength	Super Bright Red	640		nm	I <sub>F</sub> =20mA
Δλ1/2	Spectral Line Half-width	Super Bright Red	20		nm	I <sub>F</sub> =20mA
С	Capacitance	Super Bright Red	45		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Red	1.85	2.5	V	I <sub>F</sub> =20mA
I <sub>R</sub>	Reverse Current	Super Bright Red		10	uA	$V_R = 5V$

### 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			
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

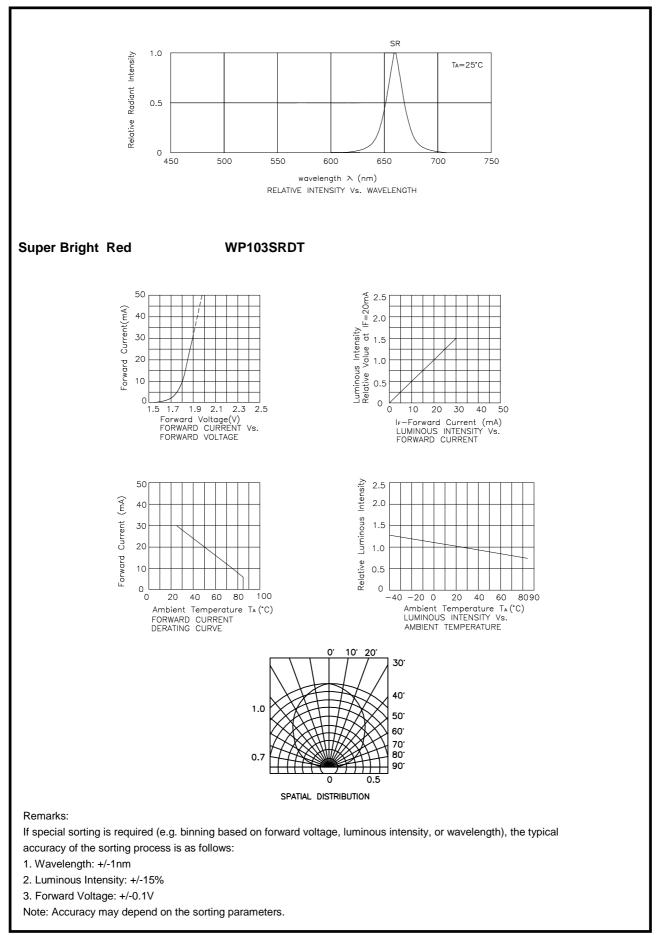
Notes:

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

2. 2mm below package base.

3. 5mm below package base.

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REV NO: V.1 CHECKED: Allen Liu DATE: APR/19/2005 DRAWN: Y.W.WANG PAGE: 3 OF 3 ERP:1101000399