

# T-1 3/4 (5mm) BI-COLOR INDICATOR LAMP

WP59SRSGC/CC

SUPER BRIGHT RED SUPER BRIGHT GREEN

#### **Features**

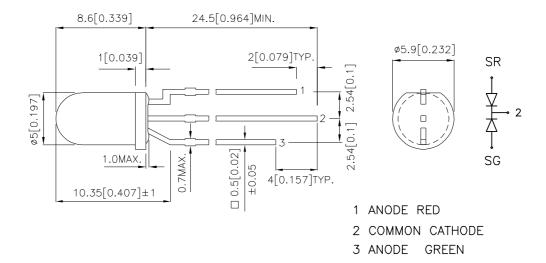
- •UNIFORM LIGHT OUTPUT.
- •LOW POWER CONSUMPTION.
- •3 LEADS WITH ONE COMMON LEAD.
- •I.C. COMPATIBLE.
- •LONG LIFE SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

### Description

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

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

# **Package Dimensions**



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- 3. Lead spacing is measured where the leads emerge from the package.
- 4. Specifications are subject to change without notice.

 SPEC NO: DSAF2653
 REV NO: V.1
 DATE: APR/19/2005
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 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: W.J.ZHU
 ERP:1101005913

# **Kingbright**

#### **Selection Guide**

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2 θ 1/2
WP59SRSGC/CC	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	280	600	24°
	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	70	200	

Note:

# Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions	
λpeak	Peak Wavelength	Super Bright Red Super Bright Green	660 565		nm	IF=20mA	
λD	Dominant Wavelength	Super Bright Red Super Bright Green	640 568		nm	IF=20mA	
Δλ1/2	Spectral Line Half-width	Super Bright Red Super Bright Green	20 30		nm	IF=20mA	
С	Capacitance	Super Bright Red Super Bright Green	45 15		pF	VF=0V;f=1MHz	
VF	Forward Voltage	Super Bright Red Super Bright Green	1.85 2.2	2.5 2.5	V	IF=20mA	
lr	Reverse Current	All		10	uA	VR = 5V	

# Absolute Maximum Ratings at Ta=25°C

Parameter	Super Bright Red	Super Bright Green	Units		
Power dissipation	100	105	mW		
DC Forward Current	30	25	mA		
Peak Forward Current [1]	155	140	mA		
Reverse Voltage	5	V			
Operating / Storage Temperature	-40°C To +85°C				
Lead Solder Temperature [2]	rature [2] 260°C For 3 Seconds				
Lead Solder Temperature [3]	solder Temperature [3] 260°C For 5 Seconds				

### Notes:

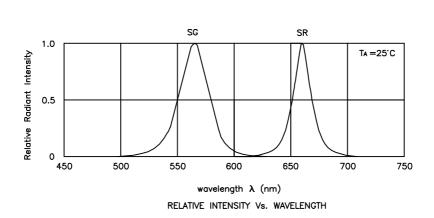
- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

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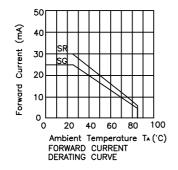
<sup>1.01/2</sup> is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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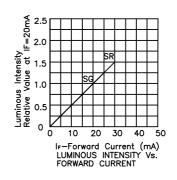


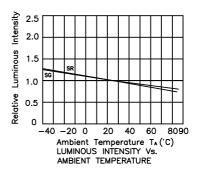
# Super Bright Red /Super Bright Green

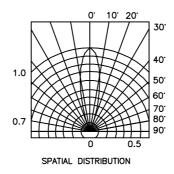
# 50 40 SR/ SG 20 10 1.5 1.7 1.9 2.1 2.3 2.5 FORWARD CURRENT VS. FORWARD VOLTAGE



#### WP59SRSGC/CC



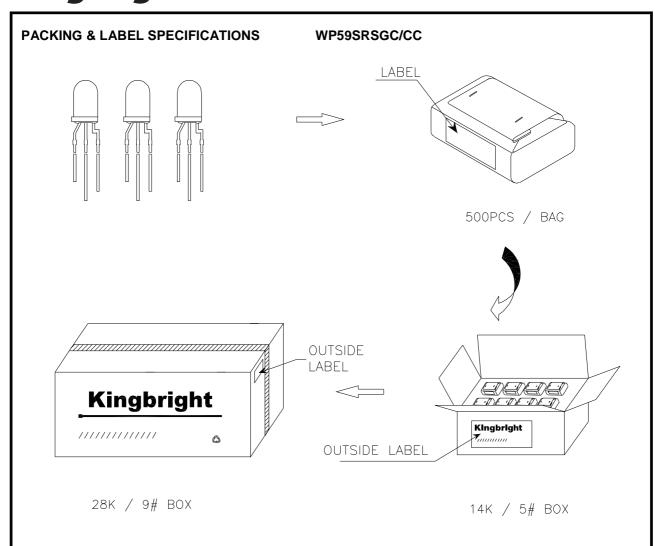


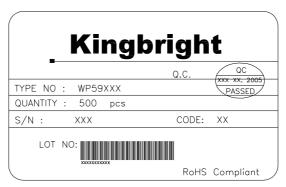


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#### Remarks:

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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