

# BL0102-14-34

26 mm LED Cluster



### DESCRIPTIONS

- 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
- · Electrostatic discharge and power surge could damage the LEDs
- . It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs
- · All devices, equipments and machineries must be electrically grounded

## **FEATURES**

- · High visibility
- No. of built-in 5mm LED lamps: Super Bright Red 6 pcs, Super Bright Green 8 pcs
- · Waterproof package with hood suitable for outdoor and indoor information boards
- · RoHS compliant

### **APPLICATIONS**

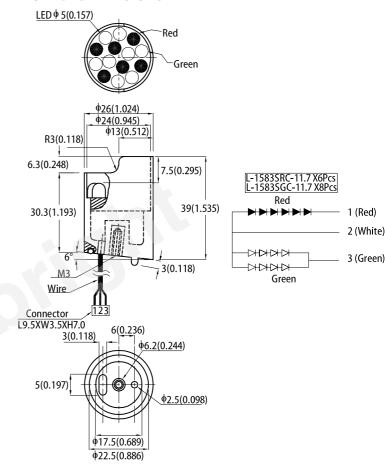
- Status indicator
- Illuminator
- Signage applications
- · Decorative and entertainment lighting
- · Commercial and residential architectural lighting

## **ATTENTION**

Observe precautions for handling electrostatic discharge sensitive devices



# **PACKAGE DIMENSIONS**



- 1. All dimensions are in millimeters (inches).
- Tolerance is ±0.25(0.01") unless otherwise noted.
   The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice

## ABSOLUTE MAXIMUM RATINGS at $T_A=25$ °C

Parameter	Symbol	Va	Unit	
		Super Bright Red	Super Bright Green	<u></u>
Total Power Dissipation	P <sub>D</sub>	450	450	mW
DC Forward Current	I <sub>F</sub>	30	60	mA
Operating Temperature	T <sub>op</sub>	-40 to	°C	
Storage Temperature	$T_{stg}$	-40 to	°C	
Reverse Voltage	$V_R$		V	

Note:
1. Relative humidity levels maintained between 40% and 60% in production area are recommended to avoid the build-up of static electricity – Ref JEDEC/JESD625-A and JEDEC/J-STD-033.



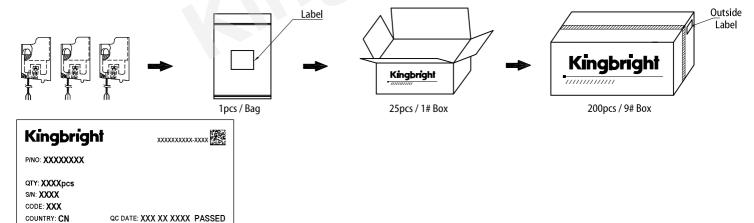


# ELECTRICAL / OPTICAL CHARACTERISTICS at T<sub>A</sub>=25°C

Parameter	Symbol	Emitting Color	Value			l lmit
			Min.	Тур.	Max.	Unit
Luminous Intensity I <sub>F</sub> = 20mA	- I <sub>V</sub>	Super Bright Red	1800	3600	-	- mcd
			*600	*1200	-	
Luminous Intensity I <sub>F</sub> = 40mA		Super Bright Green	800	1600	-	
			*800	*1600	-	
Viewing Angle	201/2	-	-	40	-	deg
Forward Voltage I <sub>F</sub> = 20mA Forward Voltage I <sub>F</sub> = 40mA	V <sub>F</sub>	Super Bright Red Super Bright Green	-	11 8.8	15 10	V
Peak Wavelength IF = 20mA Peak Wavelength IF = 40mA	$\lambda_{peak}$	Super Bright Red Super Bright Green	-	655 565	-	nm
Dominant Wavelength I <sub>F</sub> = 20mA Dominant Wavelength I <sub>F</sub> = 40mA	$\lambda_{dom}$	Super Bright Red Super Bright Green	-	640 568	-	nm
Spectral Line Half-width IF = 20mA Spectral Line Half-width IF = 40mA	Δλ 1/2	Super Bright Red Super Bright Green		20 30	-	nm
Reverse Current (V <sub>R</sub> = 5V)	I <sub>R</sub>	Super Bright Red Super Bright Green		-	10 20	uA

Wavelength value is traceable to CIE127-2007 standards

### **PACKING & LABEL SPECIFICATIONS**



### **PRECAUTIONARY NOTES**

- The information included in this document reflects representative usage scenarios and is intended for technical reference only.
- The part number, type, and specifications mentioned in this document are subject to future change and improvement without notice. Before production usage customer should refer to the latest datasheet for the updated specifications.
- When using the products referenced in this document, please make sure the product is being operated within the environmental and electrical limits specified in the datasheet. If customer usage exceeds the specified limits, Kingbright will not be responsible for any subsequent issues.

  The information in this document applies to typical usage in consumer electronics applications. If customer's application has special reliability requirements or have life-threatening
- liabilities, such as automotive or medical usage, please consult with Kingbright representative for further assistance.

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- All design applications should refer to Kingbright application notes available at http://www.King



RoHS Compliant

<sup>\*</sup> Luminous intensity value is traceable to CIE127-2007 standards

<sup>2.</sup> Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure