



**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
DISCHARGE  
SENSITIVE  
DEVICES

Part Number: BL0709-18-462

Super Bright Red  
Blue  
Super Bright Green

### Features

- High visibility.
- Water proof package with hood suitable for outdoor and indoor information boards.
- Can produce any color in visible spectrum, including white light.
- RoHS compliant.

### Description

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

The Blue source color devices are made with InGaN Light Emitting Diode.

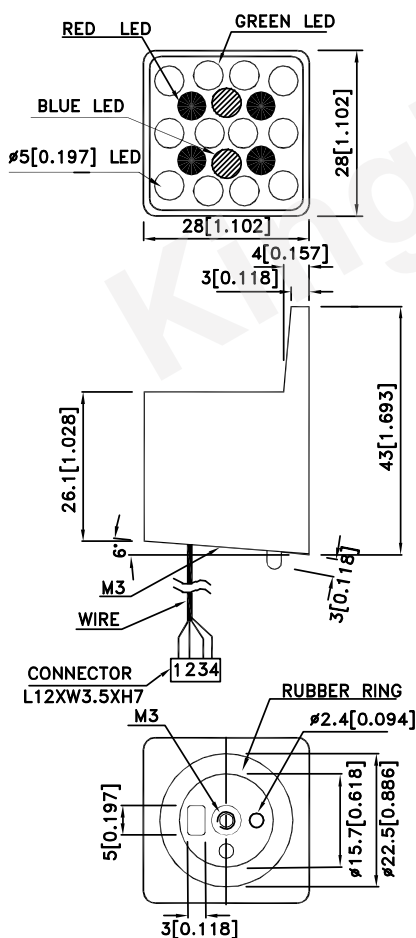
The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

Static electricity and surge damage the LEDs.

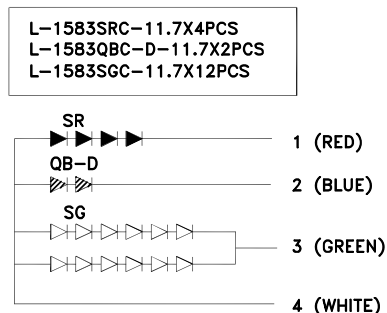
It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

### Package Dimensions



LED : L-1583SRC-11.7X4PCS  
L-1583QBC-D-11.7X2PCS  
L-1583SGC-11.7X12PCS



### Notes:

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



## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

Symbol	Parameter	Device	Type.	Min	Typ.	Max.	Units	Test Conditions	
I <sub>v</sub>	Luminous Intensity	BL0709-18-462	SR	1200	2400	-	mcd	I <sub>F</sub> =20mA	
				*400	*800				
			QB-D	1600	3000	-		I <sub>F</sub> =20mA	
				*1600	*3000				
			SG	1200	2400	-		I <sub>F</sub> =40mA	
				*1200	*2400				
2 θ <sub>1/2</sub>	Viewing Angle		-	-	40	-	deg	-	
V <sub>F</sub>	Forward Voltage		SR	-	7.4	10	V	I <sub>F</sub> =20mA	
			QB-D	-	6.6	8.0		I <sub>F</sub> =20mA	
			SG	-	13.2	15		I <sub>F</sub> =40mA	
λ <sub> peak</sub>	Peak Wavelength		SR	-	660	**655	-	nm	I <sub>F</sub> = 20mA
			QB-D	-	468	**460	-		I <sub>F</sub> =20mA
			SG	-	565	**565	-		I <sub>F</sub> =40mA
λ <sub> D</sub>	Dominant Wavelength		SR	-	640	**640	-	nm	I <sub>F</sub> =20mA
			QB-D	-	470	**465	-		I <sub>F</sub> =20mA
			SG	-	568	**568	-		I <sub>F</sub> =40mA
Δλ <sub> 1/2</sub>	Spectral Line Half-width		SR	-	20		-	nm	I <sub>F</sub> =20mA
			QB-D	-	25		-		I <sub>F</sub> =20mA
		SG	-	30		-	I <sub>F</sub> =40mA		
I <sub>R</sub>	Reverse Current	-	-	-		80	μA	V <sub>R</sub> = 5 V	

Notes:

\*Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

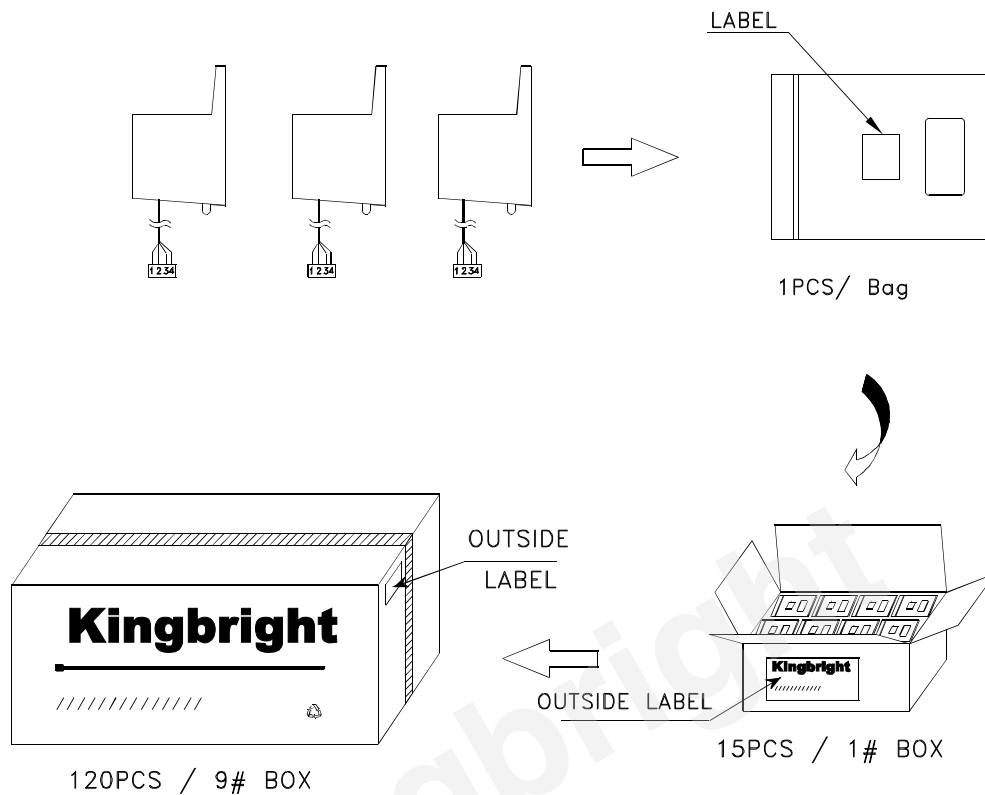
\*\*Wavelength value is traceable to the CIE127-2007 compliant national standards.

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

parameter	Value			unit
	SR	QB-D	SG	
Total Power dissipation	1290			mW
DC Forward Current	30	30	50	mA
Reverse Voltage	5			V
Operating temperature	-40°C To +70°C			
Storage Temperature	-40°C To +85°C			

## PACKING & LABEL SPECIFICATIONS

BL0709-18-462



<b>Kingbright</b>		
P/NO: BL0709-18-xxx		
QTY: 1 pcs	Q.C.	Q C
S/N: XXXX		xx xx xxxx
CODE: XXX		PASSED
LOT NO:		
RoHS Compliant		

Detailed application notes are listed on our website.  
[http://www.kingbright.com/application\\_notes](http://www.kingbright.com/application_notes)