Kingbright

28mmX28mm LED CLUSTER



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Part Number: BL0709-18-462

Super Bright Red Blue Super Bright Green

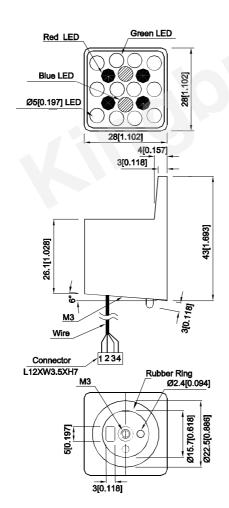
Features

- · 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.

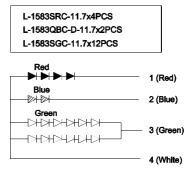
Descriptions

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

Package Dimensions



LED: L-1583SRC-11.7x4PCS L-1583QBC-D-11.7x2PCS L-1583SGC-11.7x12PCS





- 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.

Pb



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Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | Device | Value | Min | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|-------------------|-------|-------|-------|------|-------|-----------------|
| lv | Luminous Intensity | | SR | 1200 | 2400 | | mcd | IF=20mA |
| | | | | *400 | *800 |] - | | |
| | | | QB-D | 1600 | 3000 | - | | IF=20mA |
| | | | | *1600 | *3000 | | | |
| | | | SG | 1200 | 2400 | - | | IF=40mA |
| | | | | *1200 | *2400 | | | |
| 2 01/2 | Viewing Angle | | - | - | 40 | - | deg | - |
| VF | Forward Voltage | - BL0709-18-462 - | SR | - | 7.4 | 10 | | IF=20mA |
| | | | QB-D | - | 6.6 | 8.0 | V | IF=20mA |
| | | | SG | - | 13.2 | 15 | | IF=40mA |
| | Peak Wavelength | | SR | - | 655 | - | | IF= 20mA |
| λ peak | | | QB-D | - | 460 | - | nm | IF=20mA |
| | | | SG | - | 565 | - | | IF=40mA |
| | Dominant Wavelength | | SR | - | 640 | 1 | | IF=20mA |
| λ D | | | QB-D | - | 465 | - | nm | IF=20mA |
| | | | SG | - | 568 | - | | IF=40mA |
| Δλ 1/2 | Spectral Line Half-width | | SR | - | 20 | - | | IF=20mA |
| | | | QB-D | - | 25 | - | nm | IF=20mA |
| | | | SG | | 30 | - | | IF=40mA |
| lR | Reverse Current | | | - | - | 80 | μΑ | VR= 5 V |

Absolute Maximum Ratings at Ta=25°C

| | | 11 | | | | |
|-----------------------------------------|----------------|------|------|------|--|--|
| parameter | SR | QB-D | SG | unit | | |
| Total Power dissipation | | mW | | | | |
| DC Forward Current | 30 | 30 | 50 | mA | | |
| Electrostatic Discharge Threshold (HBM) | 3000 | 250 | 8000 | V | | |
| Reverse Voltage | | V | | | | |
| Operating temperature | -40°C To +70°C | | | | | |
| Storage Temperature | -40°C To +85°C | | | | | |

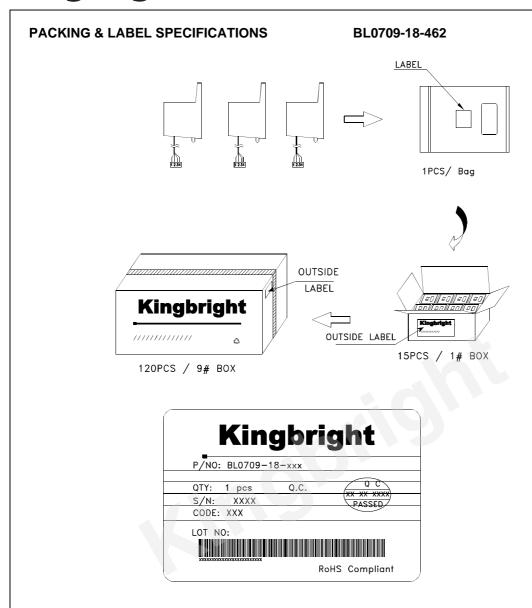
Note:

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Notes:
1. *Luminous intensity value is traceable to CIE127-2007 standards.
2. Wavelength value is traceable to CIE127-2007 standards.

^{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.

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