

BL0709-18-76

Features

- HIGH VISIBILITY.
- NO. OF BUILT-IN 5mm LED LAMPS: SUPER BRIGHT RED 4 PCS, SUPER BRIGHT GREEN 12 PCS AND BLUE 2 PCS.
- WATERPROOF PACKAGE WITH HOOD SUITABLE FOR OUTDOOR AND INDOOR INFORMATION BOARDS.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.

Description

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

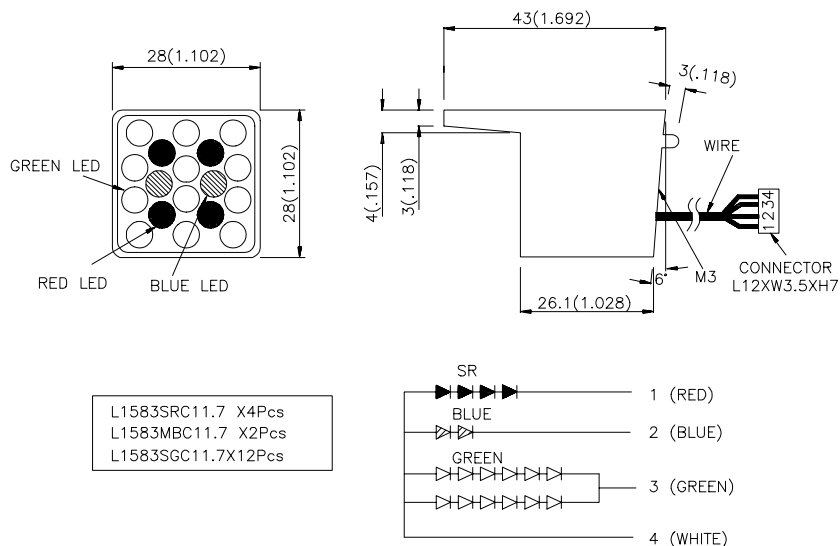
The Blue source color devices are made with GaN on SiC Light Emitting Diode.

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.

The Super Bright Green 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 lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Emitting Color +Material	$\lambda D(nm)$	Lens Type	Iv (mcd) @20mA		Viewing Angle	IF (mA)
				Min.	Typ.		
BL0709-18-76	GaAlAs	640	WATER CLEAR	800	1800	40	20
	GaN	455	WATER CLEAR	25	70	40	20
	GaP	568	WATER CLEAR	720	1200	40	40

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 $T_A=25^\circ C$

Symbol	Parameter	Device	Color	Min.	Typ.	Max.	Units	Test Conditions
Iv	Luminous Intensity	BL0709-18-76	Super Bright Red	800	1800	-	mcd	IF=20mA
			Blue	25	70	-		IF=20mA
			Super BrightGreen	720	1200	-		IF=40mA
θ	Viewing Angle		Super Bright Red	-	40	-	Deg	-
			Blue					
			Super BrightGreen					
V_F	Forward Voltage		Super Bright Red	-	7.4	10	V	IF=20mA
			Blue		7.6	9		IF=20mA
			Super BrightGreen		13.2	15		IF=40mA
λ_{peak}	Peak Wavelength		Super Bright Red	-	660	-	nm	IF=20mA
			Blue		430			IF=20mA
			Super BrightGreen		565			IF=40mA
λD	Dominate Wavelength		Super Bright Red	-	640	-	nm	IF=20mA
			Blue		455			IF=20mA
			Super BrightGreen		568			IF=40mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth		Super Bright Red	-	20	-	nm	IF=20mA
			Blue		65			IF=20mA
			Super BrightGreen		30			IF=40mA
I_R	Reverse Current		Super Bright Red	-	10	-	uA	VR = 5V
			Blue		10			
			Super BrightGreen		20			

Absolute Maximum Ratings at $T_A=25^\circ C$

Parameter	Super Bright Red	Blue	Super Bright Green	Units
Power dissipation	210	270	580	mW
DC Forward Current	30	30	50	mA
Reverse Voltage	5	5	5	V
Operating Temperature	-40 C To +70 C			
Storage Temperature	-40 C To +85 C			