

GLP-003SGC	SUPER BRIGHT GREEN
GLP-003SURC	HYPER RED
GLP-003MBC	BLUE
GLP-003PBC	BLUE

Features

- LOW POWER REQUIREMENTS.
- LARGE AREA, UNIFORM, BRIGHT LIGHT EMITTING SURFACE.
- EASY FOR INSTALLATION.
- LOW POWER CONSUMPTION.

Description

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

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

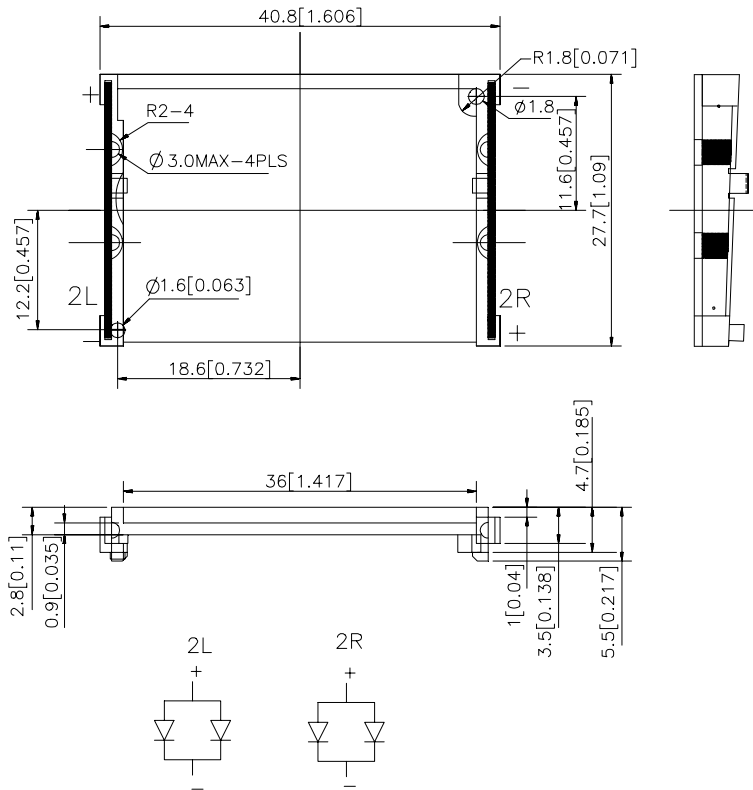
The Blue (MB) source color devices are made with GaN on SiC Light Emitting Diode.

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 Blue (PB) source color devices are made with InGaN on SiC Light Emitting Diode.

Package Dimensions & Internal Circuit Diagram



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.

Optical Characteristics

Part No.	Dice	lv (Lux) @80mA	VF
		Typ.	
GLP-003SGC	SUPER BRIGHT GREEN (GaP)	72.8	2.2
GLP-003SURC	HYPER RED (InGaAlP)	87.4	1.88
GLP-003MBC	BLUE (GaN)	173	3.8
GLP-003PBC	BLUE (InGaN)	390	3.5

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Green Hyper Red(SUR) Blue (MB) Blue (PB)	565 640 430 468		nm	IF=20mA
λ_D	Dominate Wavelength	Super Bright Green Hyper Red Blue (MB) Blue (PB)	568 628 455 465		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Super Bright Green Hyper Red Blue (MB) Blue (PB)	30 27 60 25		nm	IF=20mA
C	Capacitance	Super Bright Green Hyper Red Blue (MB) Blue (PB)	15 45 65 65		pF	VR =0V;f=1MHz
V _F	Forward Voltage	Super Bright Green Hyper Red Blue (MB) Blue (PB)	2.2 1.9 4.0 3.65	2.5 2.5 4.5 4.2	V	IF=20mA
I _R	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Super Bright Green	Hyper Red	Blue (MB)	Blue (PB)	Units
Power dissipation	105	170	105	102	mW
DC Forward Current	25	30	30	30	mA
Peak Forward Current [1]	140	185	150	160	mA
Reverse Voltage	5	5	5	5	V
Operating Temperature	-40°C To +85°C		-40°C To +80°C	-20°C To +80°C	
Storage Temperature	-40°C To +85°C		-40°C To +85°C	-30°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds				