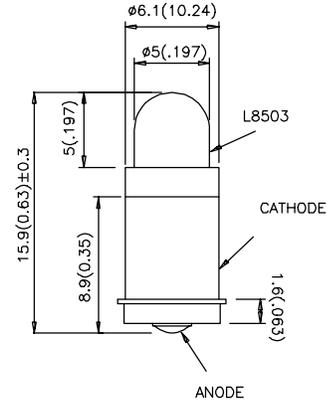


### Features

- BUILT-IN CURRENT LIMITING RESISTOR FOR DIRECT APPLICATION OF DIFFERENT ACROSS CURRENT.
- LONG LIFE.
- LOW CURRENT, POWER SAVINGS.
- LOW MAINTENANCE.
- DIFFERENT COLOR AVAILABLE.
- SOLID STATE, HIGH VIBRATION RESISTANT.

BLF051 SERIES

### Package Dimensions



### Description

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

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

The Super Bright Yellow source color devices are made with DH InGaAlP on GaAs substrate Light Emitting Diode.

#### 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 subjected to change without notice.

### Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) V=6V, V=12V V=24V		Viewing Angle
			Min.	Typ.	
BLF051SURC/E-6V	HYPER RED (InGaAlP)	WATER CLEAR	1000	2000	30°
BLF051SURC/E12V		WATER CLEAR	1000	2000	30°
BLF051SURC/E24V		WATER CLEAR	1000	2000	30°
BLF051MGC-6V-P	MEGA GREEN (InGaAlP)	WATER CLEAR	400	1000	30°
BLF051MGC-12V-P		WATER CLEAR	400	1000	30°
BLF051MGC-24V-P		WATER CLEAR	400	1000	30°
BLF051SYC-6V-P	SUPER BRIGHT YELLOW (InGaAlP)	WATER CLEAR	400	1000	30°
BLF051SYC-12V-P		WATER CLEAR	400	1000	30°
BLF051SYC-24V-P		WATER CLEAR	400	1000	30°

#### 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<sub>A</sub>=25°C

Symbol	Parameter	Device	Typ.	Units	Test Conditions
$\lambda_{\text{peak}}$	Peak Wavelength	Hyper Red Mega Green (MG) Super Bright Yellow (SY)	640 565 590	nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Hyper Red Mega Green (MG) Super Bright Yellow (SY)	20 30 20	nm	IF=20mA
$I_F$	Forward Current	Hyper Red	25	mA	VF=6V
		Mega Green (MG)	23		
		Super Bright Yellow (SY)	25		
$I_F$	Forward Current	Hyper Red	21	mA	VF=12V
		Mega Green (MG)	21		
		Super Bright Yellow (SY)	25		
$I_F$	Forward Current	Hyper Red	16	mA	VF=24V
		Mega Green (MG)	16		
		Super Bright Yellow (SY)	16		
$I_R$	Reverse Current	All	10	uA	VR= 5V

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

Parameter	Hyper Red	Mega Green	Super Bright Yellow	Units
Power dissipation (6V)	160	150	150	mW
Power dissipation (12V)	270	250	300	mW
Power dissipation (24V)	380	380	380	mW
Derating Linear from 50°C	0.4	0.4	0.4	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40 °C To +85 °C			