BLB102SURC-E-12V-P HYPER RED

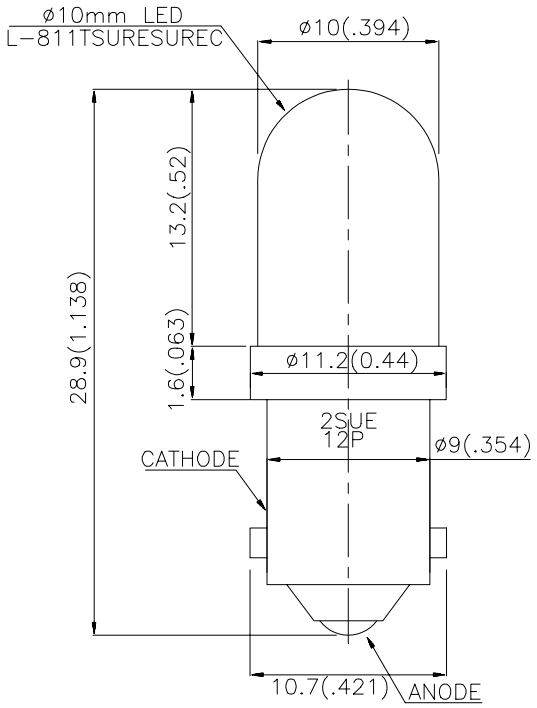
Features

- 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.
- CONTINUOUS OPERATING LIFE 25000 HOURS AT ROOM TEMPERATURE 25 °C.
- 12V INTERNAL RESISTOR

Description

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

Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Specifications are subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) V=12V		Viewing Angle
			Min.	Typ.	2θ1/2
BLB102SURC-E-12V-P	HYPER RED (InGaAlP)	WATER CLEAR	650	1800	40°

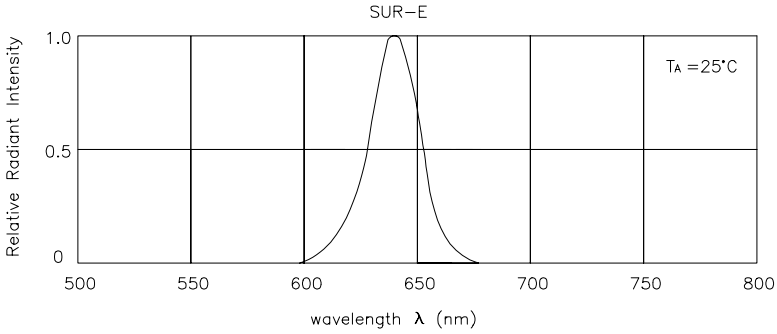
Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Hyper Red	640		nm	V_F =12V
λD	Dominate Wavelength	Hyper Red	630		nm	V_F =12V
Δλ1/2	Spectral Line Half-width	Hyper Red	25		nm	V_F =12V
I_F	Forward Current	Hyper Red	25		mA	V_F =12V
C	Capacitance	Hyper Red	45		pF	V_F =0V, f=1MHz
I_R	Reverse Current	Hyper Red		10	uA	V_R =5V

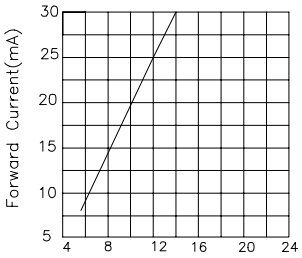
Absolute Maximum Ratings at T_A=25°C

Parameter	Hyper Red	Units
Power dissipation	400	mW
Forward Voltage	14	V
Reverse Voltage	5	V
Operating Temperature	-40 To +70	°C
Storage Temperature	-40 To +85	°C

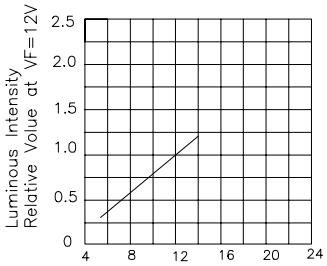


RELATIVE INTENSITY Vs. WAVELENGTH

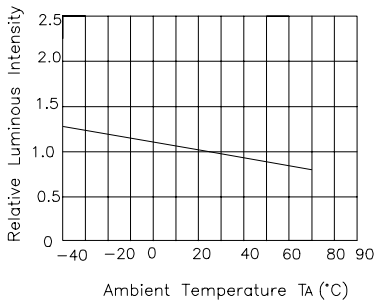
Hyper Red BLB102SURC-E-12V-P



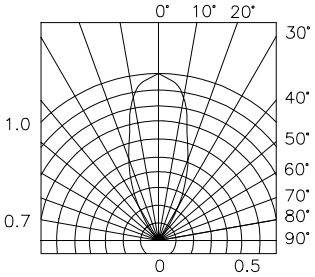
FORWARD VOLTAGE Vs. FORWARD CURRENT



FORWARD VOLTAGE Vs. LUMINOUS INTENSITY



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION