

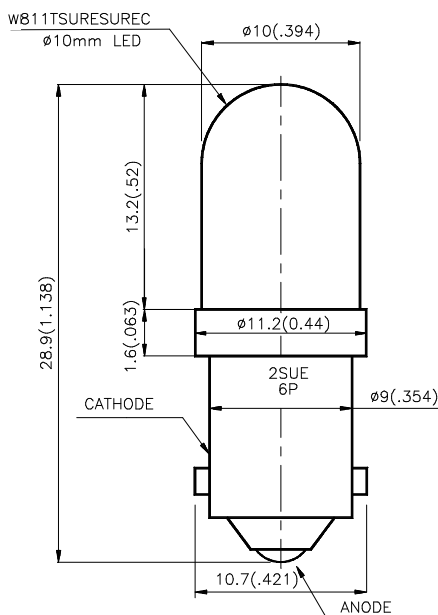
### Features

- BUILT-IN CURRENT LIMITING RESISTOR FOR DIRECT APPLICATION OF DIFFERENT ACROSS CURRENT.
- LONG LIFE.
- LOW CURRENT, POWER SAVINGS.
- LOW MAINTENANCE.
- SOLID STATE, HIGH VIBRATION RESISTANT.
- 6V INTERNAL RESISTOR.

### Description

The Hyper Red source color devices are made with DH InGaAlP on GaAs substrate 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. Specifications are subject to change without notice.

## Selection Guide

| Part No.        | Dice                 | Lens Type   | Iv (mcd)<br>V=6V |      | Viewing<br>Angle |
|-----------------|----------------------|-------------|------------------|------|------------------|
|                 |                      |             | Min.             | Typ. | 2θ1/2            |
| BLB102SURC/E-6V | HYPERS RED (InGaAlP) | WATER CLEAR | 900              | 2200 | 40°              |

Note:

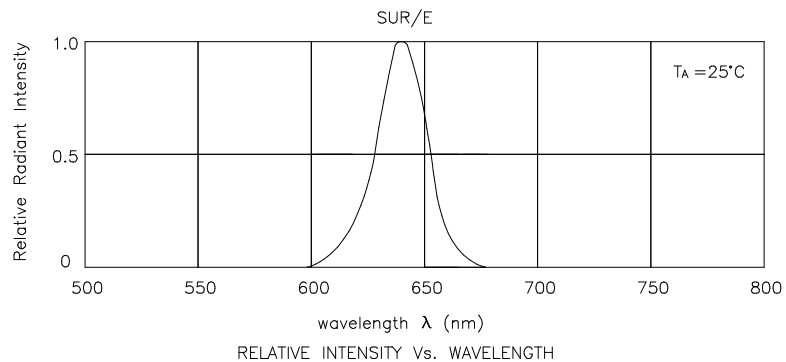
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

| Symbol            | Parameter                | Device    | Typ. | Max. | Units | Test Conditions            |
|-------------------|--------------------------|-----------|------|------|-------|----------------------------|
| λ <sub>peak</sub> | Peak Wavelength          | Hyper Red | 640  |      | nm    | V <sub>F</sub> =6V         |
| λ <sub>D</sub>    | Dominate Wavelength      | Hyper Red | 630  |      | nm    | V <sub>F</sub> =6V         |
| Δλ <sub>1/2</sub> | Spectral Line Half-width | Hyper Red | 25   |      | nm    | V <sub>F</sub> =6V         |
| I <sub>F</sub>    | Forward Current          | Hyper Red | 30   |      | mA    | V <sub>F</sub> =6V         |
| C                 | Capacitance              | Hyper Red | 45   |      | pF    | V <sub>F</sub> =0V, f=1MHz |
| I <sub>R</sub>    | Reverse Current          | Hyper Red |      | 10   | μA    | V <sub>R</sub> =5V         |

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

| Parameter             | Hyper Red  | Units |
|-----------------------|------------|-------|
| Power dissipation     | 180        | mW    |
| DC Forward Voltage    | 7          | V     |
| Reverse Voltage       | 5          | V     |
| Operating Temperature | -40 To +70 | °C    |
| Storage Temperature   | -40 To +85 | °C    |



## Hyper Red

### BLB102SURC/E-6V

