

#### T-1 (3mm) SOLID STATE LAMP

W7104SURC

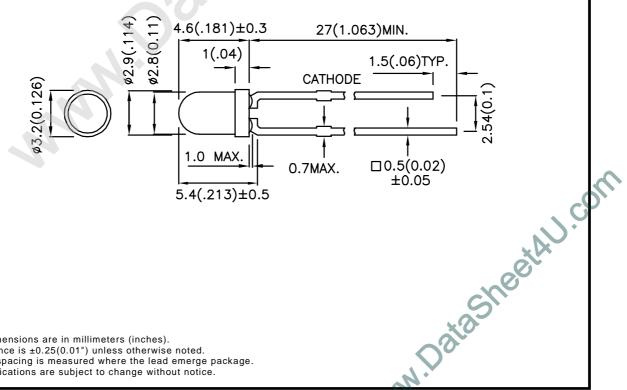
HYPER RED

- **•ULTRA BRIGHTNESS**
- OUTSTANDING MATERIAL EFFICIENCY.
- •RELIABLE AND RUGGED.
- •IC COMPATIBLE/LOW CURRENT CAPABILITY.

#### **Description**

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

### **Package Dimensions**



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±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.

SPEC NO: DSAD9058 **REV NO: V.1** DATE: JAN/27/2004 **PAGE: 1 OF 3** DRAWN: L.L.NIE APPROVED: J. Lu **CHECKED: Allen Liu** 

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### **Selection Guide**

| Part No.  | Dice                | Lens Type   | lv (m<br>@ 20 | ,    | Viewing<br>Angle |
|-----------|---------------------|-------------|---------------|------|------------------|
|           |                     |             | Min.          | Тур. | 201/2            |
| W7104SURC | HYPER RED (InGaAIP) | WATER CLEAR | 480           | 1000 | 34°              |

#### Note:

### Electrical / Optical Characteristics at Ta=25°C

| Symbol | Parameter                | Device    | Тур. | Max. | Units | Test Conditions |
|--------|--------------------------|-----------|------|------|-------|-----------------|
| λpeak  | Peak Wavelength          | Hyper Red | 640  |      | nm    | IF=20mA         |
| λD     | Dominate Wavelength      | Hyper Red | 628  |      | nm    | IF=20mA         |
| Δλ1/2  | Spectral Line Half-width | Hyper Red | 27   |      | nm    | IF=20mA         |
| С      | Capacitance              | Hyper Red | 45   |      | pF    | VF=0V;f=1MHz    |
| VF     | Forward Voltage          | Hyper Red | 1.9  | 2.5  | V     | IF=20mA         |
| lR     | Reverse Current          | Hyper Red |      | 10   | uA    | VR = 5V         |

## Absolute Maximum Ratings at Ta=25°C

| Parameter                                      | Hyper Red           | Units |  |
|--|---------------------|-------|--|
| Power dissipation                              | 170                 | mW    |  |
| DC Forward Current                             | 30                  | mA    |  |
| Peak Forward Current [1]                       | 185                 | mA    |  |
| Reverse Voltage                                | 5                   | V     |  |
| Operating / Storage Temperature -40°C To +85°C |                     |       |  |
| Lead Solder Temperature [2]                    | 260°C For 5 Seconds |       |  |

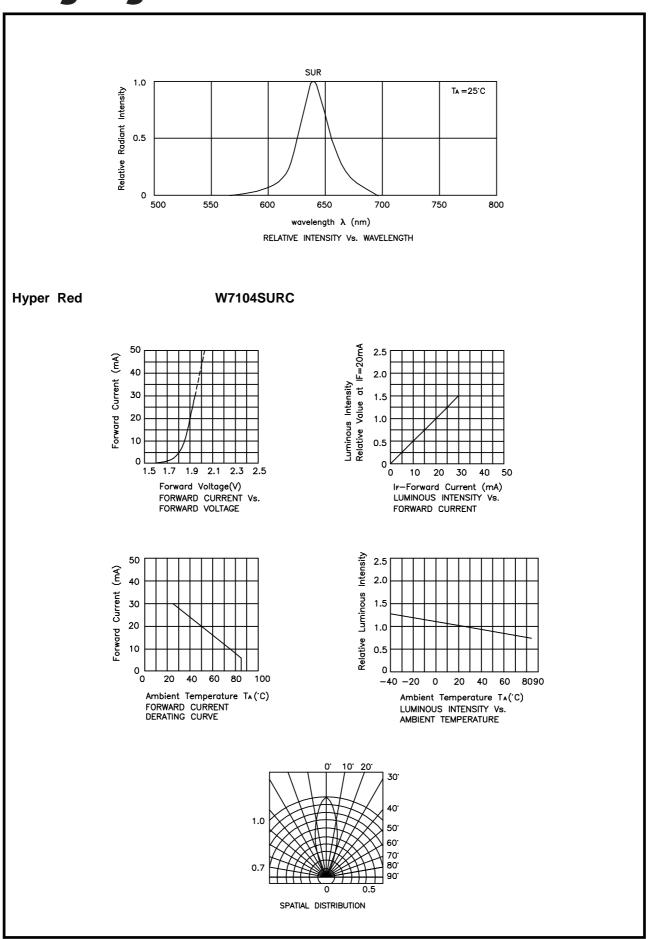
#### Notes:

- 1. 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2. 2mm below package base.

SPEC NO: DSAD9058 REV NO: V.1 DATE: JAN/27/2004 PAGE: 2 OF 3
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 $<sup>1.\,\</sup>theta1/2$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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