

### Features

- \* LOW CURRENT REQUIREMENTS
- \* HIGH LIGHT OUTPUT
- \* RELIABLE AND RUGGEN
- \* IC COMPATIBLE

### Absolute Maximum Ratings at $T_A=25^{\circ}\text{C}$

|                                                         |                  |
|---------------------------------------------------------|------------------|
| REVERSE VOLTAGE ( $<100 \mu \text{ A}$ ).....           | 4.0 V            |
| D.C. FORWARD CURRENT.....                               | 30 mA            |
| PULSE CURRENT (1/10 DUTY CYCLE,0.1 ms PULSE WIDTH)..... | 100 mA           |
| OPERATING TEMPERATURE RANGE.....                        | -25°C TO +85°C   |
| STORAGE TEMPERATURE RANGE.....                          | -25°C TO +100°C  |
| LEAD SOLDERING TEMP. (1.6mm FROM BODY).....             | 260°C FOR 5 SEC. |

### Electrical/optical characteristics at $T_A=25^{\circ}\text{C}$

| PART NUMBER    | LED CHIP |                 | LENS COLOR | WAVELENGTH TYP.<br>I <sub>F</sub> @20mA (nm) |         | FORWARD VOLTAGE<br>@20mA(V) |      | LUMINOUS INTENSITY<br>@20mA(mcd) |      | VIEW ANGLE<br>2 θ <sup>1/2</sup><br>(deg) |
|----------------|----------|-----------------|------------|----------------------------------------------|---------|-----------------------------|------|----------------------------------|------|-------------------------------------------|
|                | MATERIAL | EMITTING COLOR  |            | λ p                                          | λ d     | TYP.                        | MAX. | MIN.                             | TYP. |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
| LT0313-41-UC9T | AlGaInP  | ULTRABRIGHT RED | W.C.       | 642 ± 5                                      | 630 ± 5 | 2.2                         | 2.8  | 1000                             | 1800 | 30                                        |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |
|                |          |                 |            |                                              |         |                             |      |                                  |      |                                           |

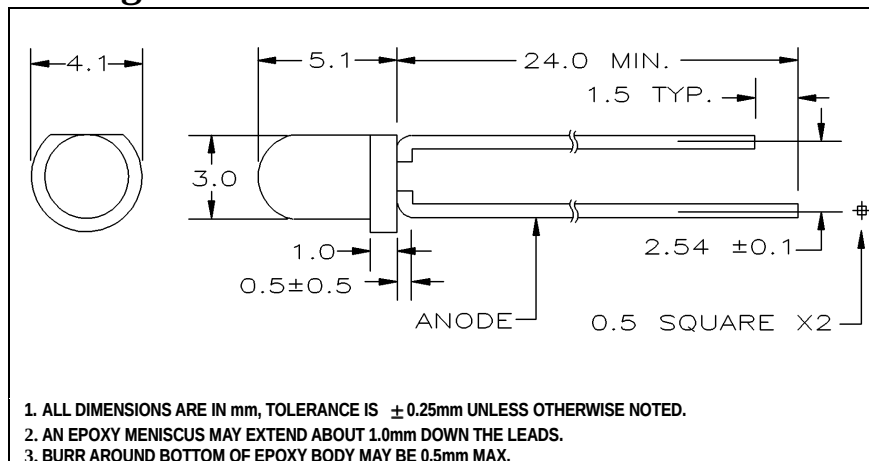
(1) LENS COLOR

W.C.....WATER CLEAR

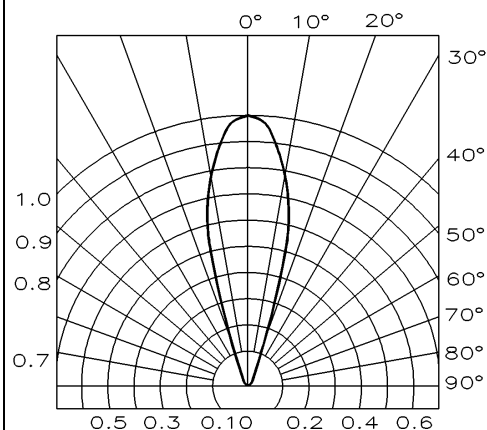
(2) SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

(3) ALL ABOVE COMPONENTS ARE CONSIDERED. DEVIATIONS FROM STATED SPECIFICATIONS WILL REQUIRE A NEW PART NUMBER BE ASSIGNED.

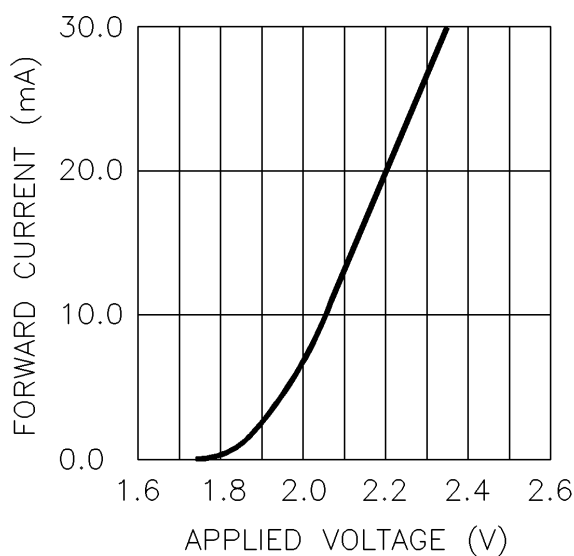
### Package Dimensions



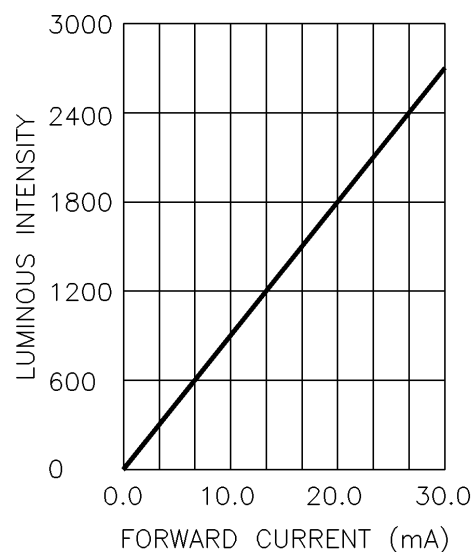
### Radiation Pattern



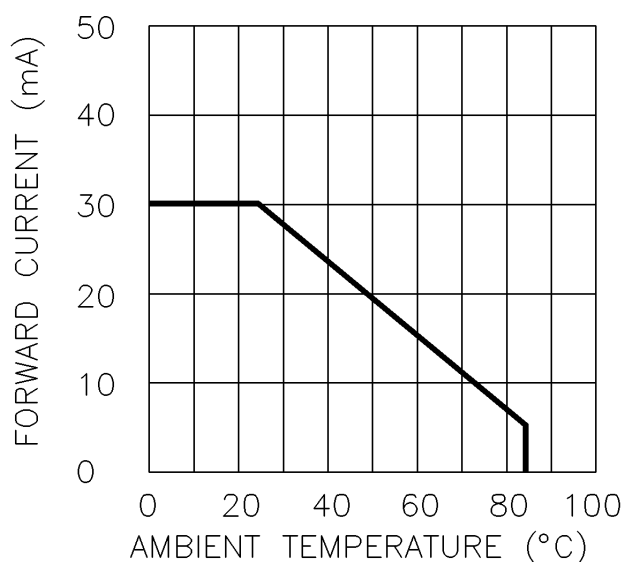
**Forward Current vs. Applied Voltage**



**Luminous Intensity vs. Forward Current**



**Forward Current vs. Ambient Temperature**



**Relative Intensity vs. Wavelength**

