

**RED****TOSHIBA T-1¾ InGaAlP Ultra Bright LED**

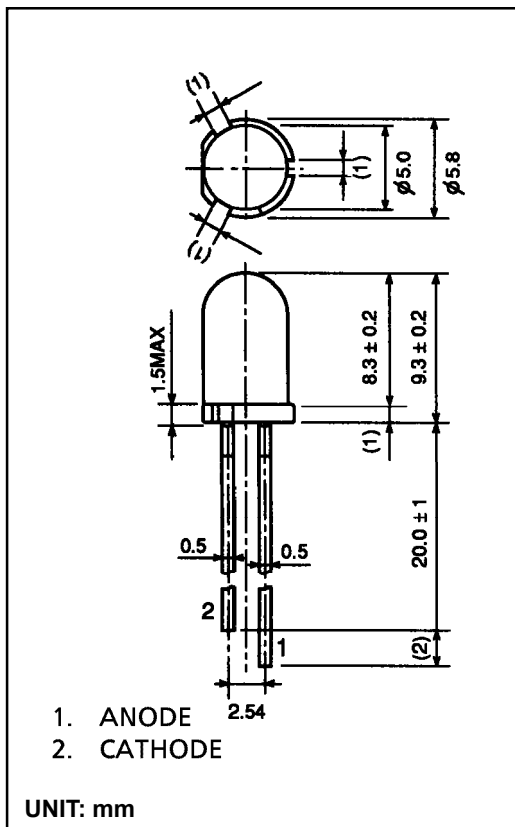
# TLRE157AP

## Product Features -

- InGaAlP Technology
- T-1¾ (5 mm) Package
- Red Light ( $\lambda_p = 644$  nm) Emission
- Water Clear Lens

## MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

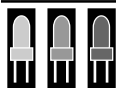
| CHARACTERISTIC        | SYMBOL    | RATING    | UNIT             |
|-----------------------|-----------|-----------|------------------|
| Forward Current       | $I_F$     | 50        | mA               |
| Reverse Voltage       | $V_R$     | 4         | V                |
| Power Dissipation     | $P_D$     | 125       | mW               |
| Operating Temperature | $T_{opr}$ | -30 ~ 85  | $^\circ\text{C}$ |
| Storage Temperature   | $T_{stg}$ | -40 ~ 120 | $^\circ\text{C}$ |



## OPTO-ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

| CHARACTERISTIC           | SYMBOL          | TEST CONDITION      | MIN. | TYP. | MAX. | UNIT          |
|--------------------------|-----------------|---------------------|------|------|------|---------------|
| Forward Voltage          | $V_F$           | $I_F = 20\text{mA}$ | —    | 1.85 | 2.4  | V             |
| Reverse Current          | $I_R$           | $V_R = 4\text{V}$   | —    | —    | 50   | $\mu\text{A}$ |
| Luminous Intensity       | $I_v$           | $I_F = 20\text{mA}$ | 270  | 900  | —    | mcd           |
| Viewing Angle            | $2\theta_{1/2}$ | —                   | —    | 22   | —    | $^\circ$      |
| Peak Wavelength          | $\lambda_p$     | $I_F = 20\text{mA}$ | —    | 644  | —    | nm            |
| Dominant Wavelength      | $\lambda_d$     | $I_F = 20\text{mA}$ | —    | 630  | —    | nm            |
| Spectral Line Half Width | $\Delta\lambda$ | $I_F = 20\text{mA}$ | —    | 18   | —    | nm            |

\* Luminous Ranks: (Q : 320-640mcd), (R : 560-1120mcd), (S : 1000-2000mcd) Upper and lower limit tolerance  $\pm 15\%$   
Available in Two Bin Combinations: (QR), (RS)



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## TLRE157AP Graphs -

