



**ELECTRONICS, INC.**  
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## NTE3025 Light Emitting Diode (LED)

**Description:**

The NTE3025 is a red Light emitting Gallium Arsenide Phosphide diode in a T-1 3/4 (5mm) type package designed for use in applications such as instruments, printed circuit board indicators, and board mounted panel displays.

**Features:**

- Low Power Consumption
- High Intensity
- IC Compatible/Low Current Requirements
- Versatile mounting on P.C. board or panel
- Reliable and Rugged

**Absolute Maximum Ratings:** ( $T_A = +25^{\circ}\text{C}$  unless otherwise specified)

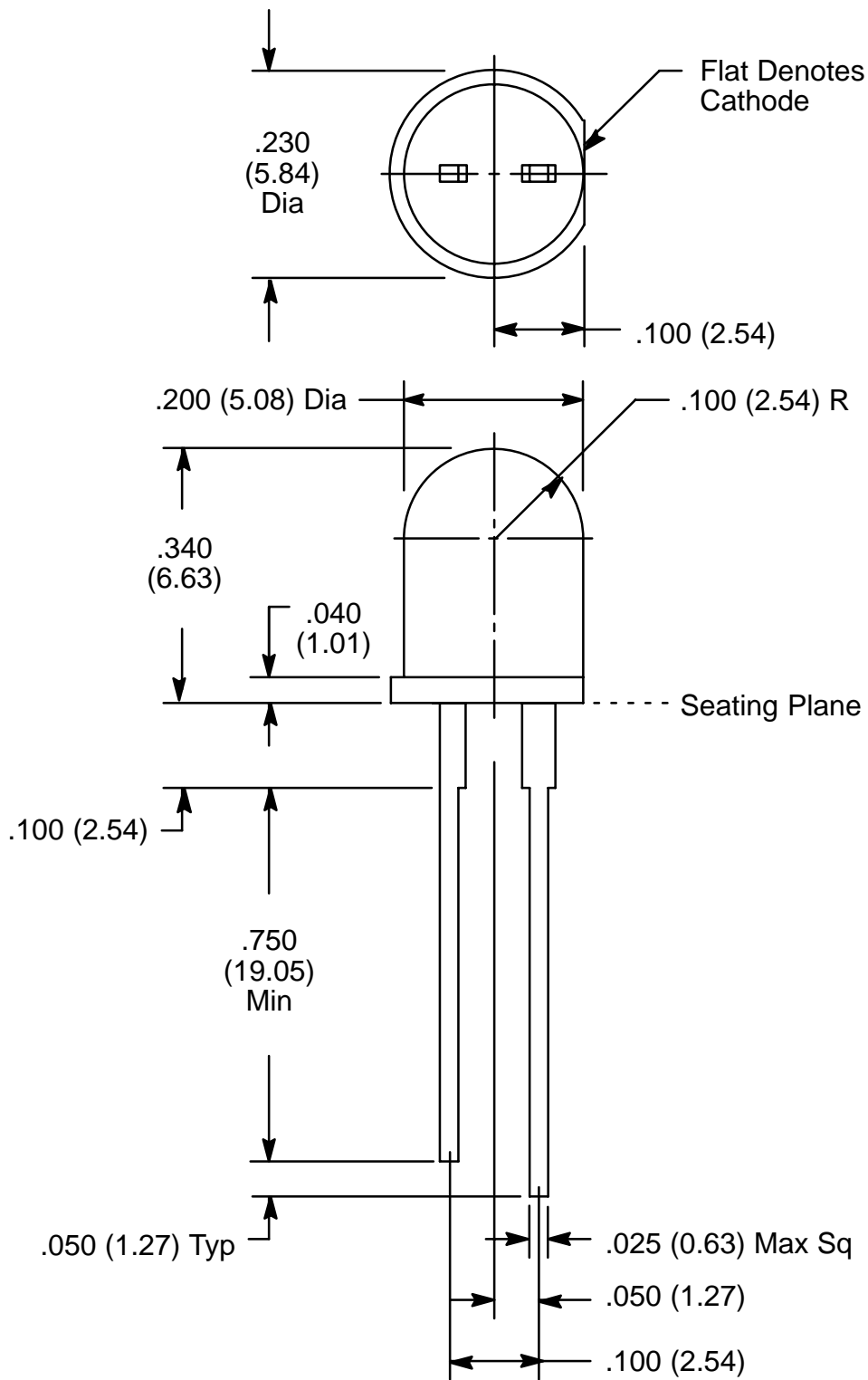
Power Dissipation, $P_D$ .....	110mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width), $I_{F(\text{Peak})}$ .....	200mA
Continuos Forward Current, $I_F$ .....	40mA
Derate Linearly Above $25^{\circ}\text{C}$ .....	0.5mA/ $^{\circ}\text{C}$
Reverse Voltage, $V_R$ .....	5V
Operating Temperature Range, $T_A$ .....	$-55^{\circ}$ to $+100^{\circ}\text{C}$
Storage Temperature Range, $T_{\text{stg}}$ .....	$-55^{\circ}$ to $+100^{\circ}\text{C}$
Lead Temperature (During Soldering, .063 in. (1.6mm) from Body for 5sec), $T_L$ .....	$+260^{\circ}\text{C}$

**Electrical/Optical Characteristics:** ( $T_A = +25^{\circ}\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Luminous Intensity	$I_V$	$I_F = 10\text{mA}$ , Note 1	0.3	1.1	–	mcd
Viewing Angle	$2\theta^{1/2}$	Note 2	–	36	–	deg.
Peak Emission Wavelength	$\lambda_P$		–	655	–	nm
Spectral Line Half Width	$\Delta\lambda$		–	40	–	nm
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	–	1.7	2.0	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	–	–	100	$\mu\text{A}$
Capacitance	C	$V_F = 0$ , $f = 1\text{MHz}$	–	30	–	pF

Note 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission Internationale De L'Eclairage) eye-response curve.

Note 2.  $\theta^{1/2}$  is the off-axis angle at which the liminous intensity is half the axial luminous intensity.



Tolerance  $\pm .010$  (.254)