



ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748-5089
<http://www.nteinc.com>

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
Continuous Forward Current, I_F 40mA
Derate Linearly Above 25°C $0.5\text{mA}/^{\circ}\text{C}$
Reverse Voltage, V_R 5V
Operating Temperature Range, T_A -55° to $+100^{\circ}\text{C}$
Storage Temperature Range, T_{stg} -55° to $+100^{\circ}\text{C}$
Lead Temperature (During Soldering, .063 in. (1.6mm) from Body for 5sec), T_L $+260^{\circ}\text{C}$

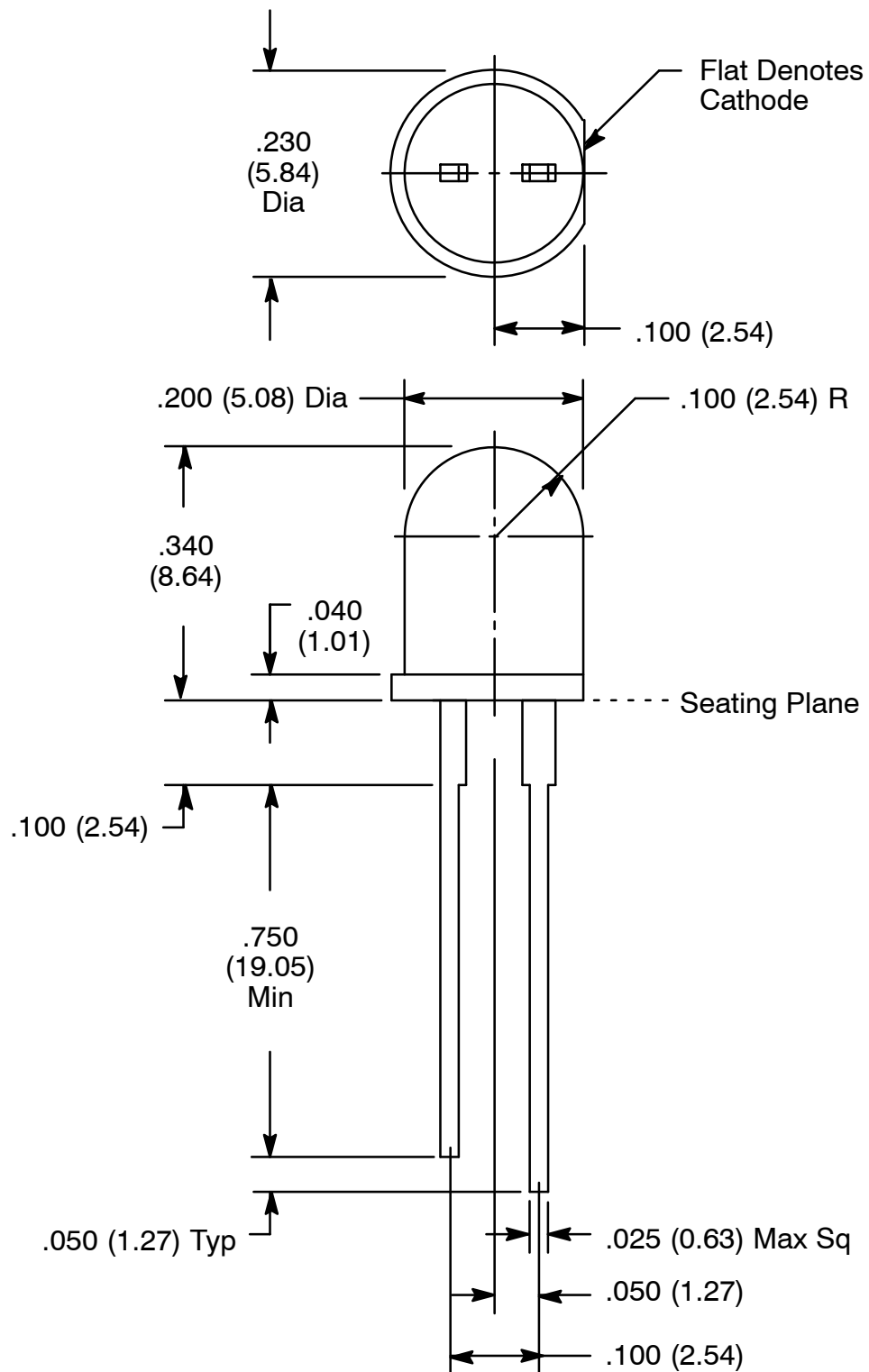
Electrical/Optical Characteristics: ($T_A = +25^{\circ}\text{C}$ unless otherwise specified)

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	λ_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	μA
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 luminous intensity is half the axial luminous intensity.

Rev. 1-13



Tolerance $\pm .010$ (.254)