



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



NTE3004 Light Emitting Diode (LED) Super Bright Red, Axial Lead

Features:

- Super Red Source Color (GaAlAs) with Red Diffused Lens
- Reliable and Rugged
- Less Than 100ns Turn On Time
- Cool Beam, Safe to Touch
- Superior Resistance to Moisture

Applications:

- Small Indicator for Indoor Applications
- Flat Backlight for LCD, Switches and Symbols
- Indicator and Backlight in Office Equipment

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

Power Dissipation, P_d	105mW
DC Forward Current, I_F	
Continuous	25mA
Peak (Duty 1/10 @ 1kHz)	80mA
Reverse Voltage, V_R	5V
Reverse Current ($V_R = 5V$), I_R	10 μ A
Operating Temperature Range, T_{opr}	-25° to $+80^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+85^\circ\text{C}$
Lead Temperature (During Soldering, 5sec Max), T_L	$+260^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F = 20\text{mA}$	1.6	1.9	2.4	V
Luminous Intensity	I_V	$I_F = 20\text{mA}$	30	45	70	mcd
Viewing Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	55	60	65	deg.
Dominant Wavelength	λ_d	$I_F = 20\text{mA}$	640	645	650	nm
Peak Emission Wavelength	λ_p	$I_F = 20\text{mA}$	655	660	665	nm
Spectrum Radiation Bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	25	-	nm

Note 1. Viewing angle is the Off-axis angle at which the luminous intensity is half the axial luminous intensity.

