



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



NTE3024 Light Emitting Diode (LED) 5mm (T-1 3/4) Package

Description:

The NTE3024 is a discrete LED indicator device in a 5mm (T-1 3/4) type package. This greenish-yellow source color device is made with Gallium Phosphide and a green diffused lens.

Features:

- Low Power Consumption
- High Efficiency
- Low Current Requirement
- Reliable and Robust

Applications:

- TV Sets
- Monitors
- Telephone
- Computer
- Circuit Board

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

Power Dissipation, P_D	105mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width), $I_{F(\text{Peak})}$	150mA
Continuous Forward Current, I_F	30mA
Derate Linear from $+50^\circ\text{C}$	0.4mA/ $^\circ\text{C}$
Reverse Voltage, V_R	5V
Operating Temperature Range, T_A	-40° to $+85^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+85^\circ\text{C}$
Lead Temperature (During Soldering, 3mm From Body, 5sec Max), 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	$I_F = 20\text{mA}$	45	55	-	mcd
Viewing Angle of Half Power	$2\theta^{1/2}$	$I_F = 20\text{mA}$	-	35	-	deg.
Peak Emission Wavelength	λ_P	$I_F = 20\text{mA}$	-	572	-	nm
Dominant Emission Wavelength	λ_D	$I_F = 20\text{mA}$	565	-	575	nm
Full Width at Half Max	$\Delta\lambda$	$I_F = 20\text{mA}$	-	25	-	nm
Forward Voltage	V_F	$I_F = 20\text{mA}$	-	2.2	2.6	V
Reverse Current	I_R	$V_R = 5\text{V}$	-	-	10	μA

Note 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

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

