



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

NTE3019

Light Emitting Diode (LED)

Red Diffused, 5mm

Features:

- Tapered Barrel T-1 3/4 Package
- High Intensity Red light source with various lens colors and effects
- Versatile Mounting on PC Board or Panel
- T-1 3/4 with Stand-off

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

Reverse Voltage, V_R 5V
 Peak Forward Current (Note 1, I_F 1A
 Power Dissipation ($T_A = +25^\circ\text{C}$), P_D 180mW
 Derate linearly from 25°C 2mW/ $^\circ\text{C}$
 Operating Temperature Range, T_{opr} -55° to $+100^\circ\text{C}$
 Storage Temperature Range, T_{stg} -55° to $+100^\circ\text{C}$
 Lead Temperature (During Soldering, 1/16" (1.6mm) from case, 5sec max), T_L $+260^\circ\text{C}$

Note 1. Pulse Width = $1\mu\text{s}$, 0.3% duty cycle.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Luminous Intensity	I_V	$I_F = 20\text{ mA}$	0.9	3.0	–	mcd
Peak Wavelength	λ_p	$I_F = 20\text{ mA}$	–	–	660	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 20\text{ mA}$	–	20	–	nm
Forward Voltage	V_F	$I_F = 20\text{ mA}$	–	1.65	2.0	V
Reverse Current	I_R	$V_R = 5.0\text{V}$	–	–	100	μA
Reverse Voltage	λA	$I_R = 100\text{ }\mu\text{A}$	–	5.0	–	V
Capacitance	C	$V = 0$	–	35	–	pF
Viewing Angle	$2\theta_{1/2}$	Between 50% Points	–	60	–	degree
Rise Time	t_r	10% – 90% 50 Ω	–	50	–	ns
Fall Time	t_f	90% – 10% 50 Ω	–	50	–	ns

