



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

NTE3018 Light Emitting Diode (LED) Red Diffused, 5mm

Features:

- Tapered Barrel T-1 3/4 Package
- 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
Forward Current, I_F	
Continuous	100mA
Peak (Note 1)	1A
Power Dissipation ($T_A = +25^\circ\text{C}$), P_D	180mW
Derate linearly from 25°C	2mW/ $^\circ\text{C}$
Junction Temperature, T_J	$+100^\circ\text{C}$
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	$I_F = 20\text{ mA}$	0.1	0.4	-	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_n	$V_R = 5.0\text{V}$	-	-	100	μA
Reverse Voltage	λ_A	$I_R = 100\ \mu\text{A}$	-	5.0	-	V
Capacitance	C	$V = 0$	-	35	-	pF
Viewing Angle	$2\theta_{1/2}$	Between 50% Points	-	-	180	degree
Rise Time	t_r	10% - 90% 50 Ω	-	50	-	ns
Fall Time	t_f	90% - 10% 50 Ω	-	50	-	ns

