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## NTE3001 Light Emitting Diode Miniature, Diffused Deep Red

**Description:**

The NTE3001 is a deep red source color device intended for high volume indicator light applications where low cost, high reliability, and top performance are required. Major usage is in applications such as diagnostic lights on printed circuit boards and panel lights. This device can be used to displace subminiature lamps as small as T3/4 size.

**Features:**

- Subminiature Package
- Wide Viewing Angle
- Long Life Solid State Reliability
- Low Package Profile

**Applications:**

- Small Indicator for Indoor Applications
- Flat Backlight for LCD, Switches and Symbols
- Indicator and Backlight in Office Equipment
- Indicator and Backlight for Battery Driven Devices
- Indicator and Backlight for Audio and Video Equipment
- Automotive: Backlighting in Dashboards and Switches
- Telecommunication: Indicator and Backlighting in Telephone and FAX

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

Reverse Voltage, $V_R$ .....	5V
Forward Current, $I_F$ .....	20mA
Peak Forward Current (Pulse Width $\leq 100\mu\text{s}$ , Duty Cycle $\leq 1\%$ ), $I_{FP}$ .....	100mA
Derate Linear from $+30^\circ\text{C}$ .....	0.8mA/ $^\circ\text{C}$
Power Dissipation, $P_d$ .....	100mW
Operating Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+80^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-30^\circ$ to $+100^\circ\text{C}$
Lead Temperature (During soldering, 1.6mm from body, 5sec), $T_L$ .....	$+260^\circ\text{C}$

Rev. 12-20



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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Luminous Intensity	$I_V$	$I_F = 20\text{mA}$	80	-	150	mcd
Viewing Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	-	45	-	degrees
Peak Wavelength	$\lambda_p$	$I_F = 20\text{mA}$	640	645	650	nm
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	2.0	-	2.2	V

