



**ELECTRONICS, INC.**  
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## NTE30140 thru NTE30151 Discrete LED Indicators 3mm (T-1) Package Type

**Features:**

- All 3mm Types Available in Multiple Colors and Lens Types:

<u>Color</u>	<u>Water Clear</u>	<u>White Diffused</u>
Red	NTE30140	NTE30146
Green	NTE30141	NTE30147
Blue	NTE30142	NTE30148
White	NTE30143	NTE30149
Pink	NTE30144	NTE30150
UV/Purple	NTE30145	NTE30151

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

Power Dissipation, $P_D$ .....	80mW
Peak Forward Current (1/10th Duty Cycle, 0.1ms Pulse Width), $I_{FM}$ .....	100mA
Continuous Forward Current, $I_F$ .....	25mA
Derating Linear from $+30^\circ\text{C}$ .....	0.8mA/ $^\circ\text{C}$
Reverse Voltage, $V_R$ .....	5V
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 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
Forward Voltage NTE30140, NTE30146	$V_F$	$I_F = 20\text{mA}$	2.0	-	2.2	V
All Others			3.0	-	3.2	V
Luminous Intensity NTE30140	$I_V$	$I_F = 20\text{mA}$	500	-	800	mcd
NTE30141			5000	-	7000	mcd
NTE30142, NTE30149			1000	-	1500	mcd
NTE30143			4000	-	6000	mcd
NTE30144			300	-	400	mcd
NTE30145			100	-	150	mcd
NTE30146, NTE30148			100	-	120	mcd
NTE30147			1000	-	2000	mcd
NTE30150			60	-	80	mcd
NTE30151			40	-	50	mcd



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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Peak Emission Wavelength NTE30140, NTE30146	$\lambda_p$		620	-	630	nm
NTE30141, NTE30147			515	-	525	nm
NTE30142, NTE30148			460	-	470	nm
NTE30143, NTE30149			8000	-	12000	K
NTE30145, NTE30151			390	-	410	nm
Half Intensity Angle	$2 \theta_{1/2}$		-	30	-	deg

