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NTE30046 Infrared Emitting Diode 3mm (T-1) Package Type

Features:

- Round Head with Flange
- Water Clear Lens

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

Power Dissipation, P_D	100mW
Forward Current, I_F	
Continuous	60mA
Peak (Note 1)	1A
Reverse Voltage, V_R	5V
Operating Temperature Range, T_{opr}	-40° to $+85^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+85^\circ\text{C}$
Lead Temperature (During Soldering, 3mm from case, 5sec max), T_L	$+260^\circ\text{C}$

Note 1. Duty Ratio $\leq 1\%$, Pulse Width $\leq 100\mu\text{s}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Radiant Intensity	I_E	$I_F = 20\text{mA}$	4	7	-	mw/sr
		$I_F = 60\text{mA}$	19	25	-	mw/sr
		$I_F = 270\text{mA}$, Note 1	-	50	-	mw/sr
Peak Emission Wavelength	λ_p	$I_F = 20\text{mA}$	-	940	-	nm
Spectrum Bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	45	-	nm
Forward Voltage	V_F	$I_F = 20\text{mA}$	-	1.15	1.35	V
		$I_F = 60\text{mA}$	-	1.25	1.50	V
		$I_F = 270\text{mA}$, Note 1	-	1.60	2.00	V
Reverse Current	I_R	$V_R = 5\text{V}$	-	-	5	μA
Viewing Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$	-	30	-	degree

Note 1. Duty Ratio $\leq 1\%$, Pulse Width $\leq 100\mu\text{s}$



