



NTE3033 Infrared Photodiode

Features:

- High Sensitivity, High Reliability
- Fast Response, High Speed Modulation
- Peak Sensitivity Wavelength Compatible with Infrared Emitters
- Wide Detection Area, Wide Half Angle

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

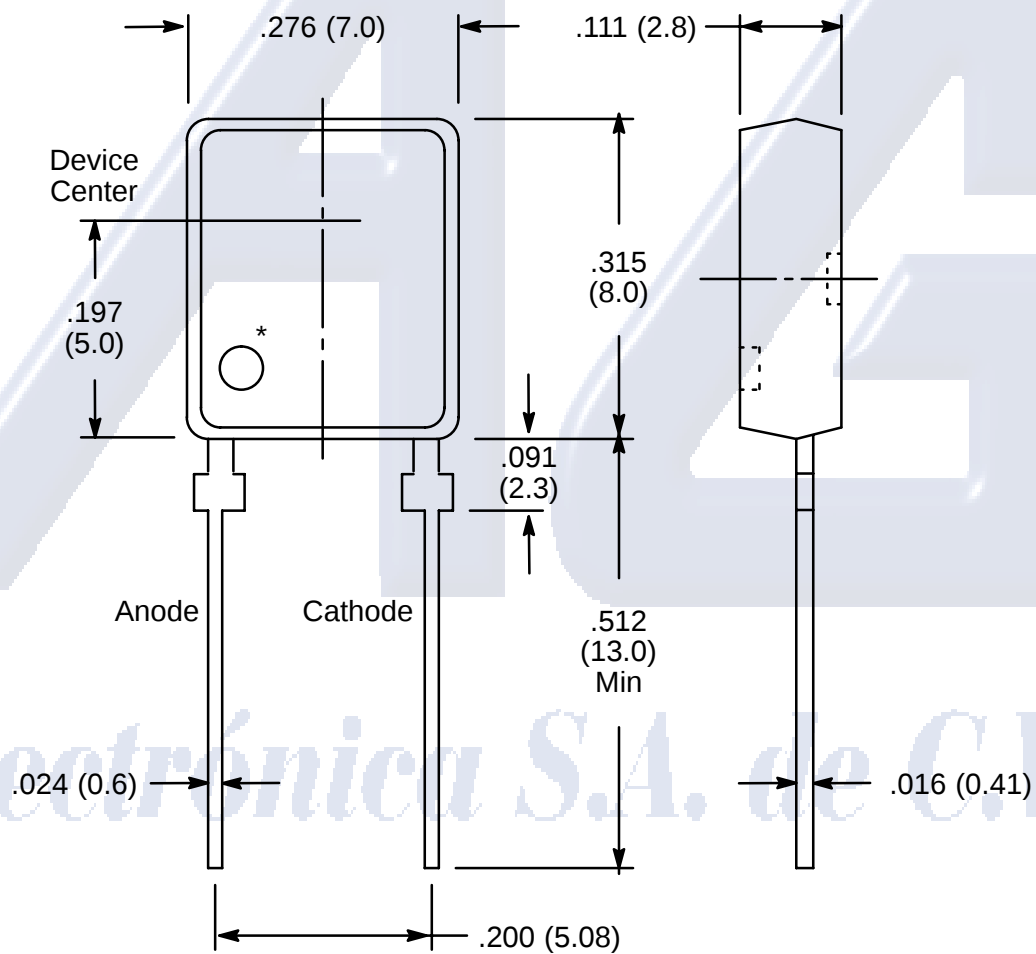
Reverse Voltage, V_R	30V
Power Dissipation, P_D	100mW
Operating Temperature range, T_{opr}	-30° to $+85^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+100^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Dark Current	I_D	$V_R = 10\text{V}$	–	5	50	nA
Light Current	I_L	$V_R = 10\text{V}$, $L = 1000 \times$, Note 1	35	50	–	μA
Peak Emission Wavelength	λ_P	$V_R = 10\text{V}$	–	900	–	nm
Rise Time	t_r	$V_R = 10\text{V}$, $R_L = 1\text{k}\Omega$	–	50	–	ns
		$V_R = 10\text{V}$, $R_L = 100\text{k}\Omega$	–	5	–	μs
Fall Time	t_f	$V_R = 10\text{V}$, $R_L = 1\text{k}\Omega$	–	50	–	ns
		$V_R = 10\text{V}$, $R_L = 100\text{k}\Omega$	–	5	–	μs
Capacitance	C_t	$V_R = 0$, $f = 1\text{MHz}$	–	70	–	pF
Beam Angle		Note 2	–	65	–	deg

Note 1. Source: Tungsten filament lamp 2856°K

Note 2. The angle when the light current is halved.



* Denotes Anode mark