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## NTE3033 Infrared Photodiode

**Description:**

The NTE3033 is a high output, high speed silicon photodiode mounted in a side-viewing plastic package with visible light cutoff filter.

**Features:**

- Visible Ray Cutoff Mold Type
- Clear Lens Type
- High Speed Response
- High Output Power

**Applications:**

- Optical Transmission
- Optic Receiver Modules

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

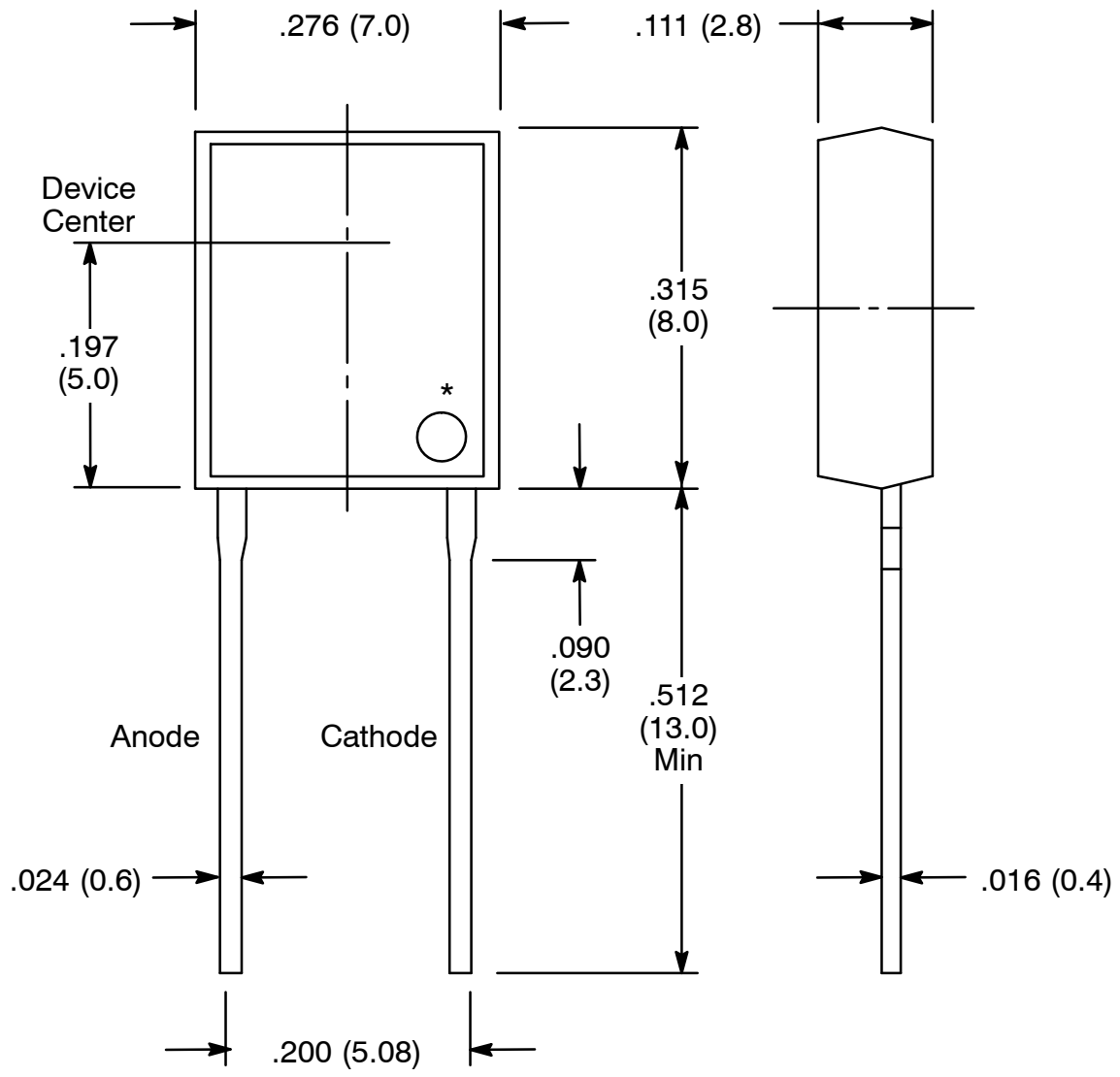
Reverse Voltage,  $V_R$  ..... 35V  
 Power Dissipation,  $P_D$  ..... 150mW  
 Operating Temperature Range,  $T_{opr}$  .....  $-30^\circ$  to  $+70^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-40^\circ$  to  $+80^\circ\text{C}$   
 Lead Temperature (During Soldering, 2mm from the package, 3sec Max.),  $T_L$  .....  $+260^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Open Circuit Voltage	$V_{CC}$	$E_e = 0.5\text{mW}/\text{cm}^2$	-	0.35	-	V
Short Circuit Current	$I_{SC}$	$E_e = 0.5\text{mW}/\text{cm}^2$	20	32	-	$\mu\text{A}$
Dark Current	$I_D$	$V_R = 10\text{V}, E_e = 0.5\text{mW}/\text{cm}^2$	-	-	30	nA
Terminal Capacitance	$C_t$	$V_R = 3\text{V}, f = 1\text{MHz}$	-	175	-	pF
Response Time	$t_r/t_f$	$V_R = 10\text{V}, R_L = 1000\Omega$	-	50/50	-	ns
Spectral Sensitivity	$\lambda$		450 ~ 1050			nm
Peak Emission Wavelength	$\lambda_p$		-	900	-	nm
Half Angle	$\Delta\theta$		-	$\pm 8$	-	deg

Rev. 4-20





\* Denotes Cathode mark