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## NTE30049 & NTE30050 Infrared Photo Diode

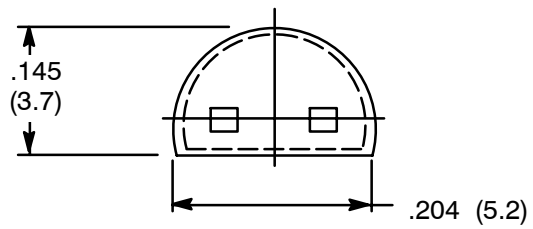
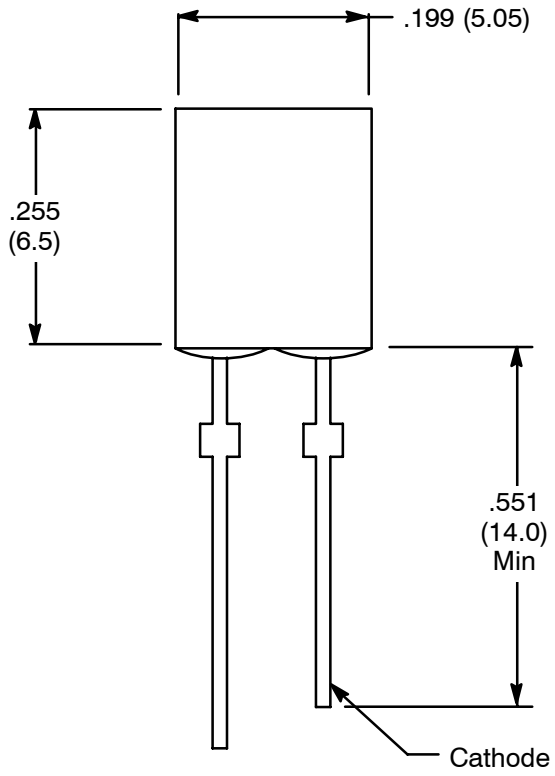
**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Active Area, AA ..... 7.16mm  
 Reverse Voltage,  $V_R$  ..... 33V  
 Power Dissipation,  $P_D$  ..... 150mW  
 Operating Temperature Range,  $T_{opr}$  .....  $-25^\circ$  to  $+85^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-40^\circ$  to  $+100^\circ\text{C}$   
 Lead Temperature (During Soldering, .078 (2mm) from case bottom, 5sec max),  $T_L$  .....  $+260^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F = 100 \text{ mA}$	-	1.3	1.6	V
Half Power NTE30049	2 $\theta$ 1/2	$E = 0.5 \text{ mW/cm}$	-	120	-	Degree
NTE30050			-	140	-	Degree
Open Circuit Voltage	$V_{OC}$	$E = 0.5 \text{ mW/cm}$	-	350	-	mV
Light Current NTE30049	$I_p$	$E = 0.5 \text{ mW/cm}, V_R = 10\text{V}$	-	20	-	$\mu\text{A}$
NTE30050			-	17	-	$\mu\text{A}$
Dark Current	$I_R$	$V_R = 10\text{V}, E = 0$	-	-	30	nA
Peak Wavelength	$\lambda_p$		-	900	-	nm
Sensitivity Wavelength NTE30049	$S_\lambda$		500	-	1100	-
NTE30050			760	-	1000	-
Rise Time	$t_r$	$V_R = 10\text{V}, R_L = 1\text{k}\Omega$	-	45	-	ns
Fall Time	$t_f$	$V_R = 10\text{V}, R_L = 1\text{k}\Omega$	-	45	-	ns

**NTE30049**



**NTE30050**

