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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
- High Output Power
- High Speed Response

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° to +70°C
Storage Temperature Range, T_{stg}	-40° to +80°C
Lead Temperature (During Soldering, 2mm from the package, 5sec Max.), T_L	+260°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_{OC}	$E_V = 1000 \text{ 1x, Note 1}$	-	0.38	-	V
Short Circuit Current	I_{SC}	$E_V = 1000 \text{ 1x, Note 1}$	24	50	-	μA
Curve Factor	CF		0.55	-	-	-
Dark Current	I_D	$V_R = 10\text{V}$	-	-	30	nA
Capacitance	C_t	$V = 0\text{V}, f = 1\text{MHz}$	-	49	-	pF
Temperature Coefficient of V_{OC}	αt		-	-2.2	-	$\text{mV}/^\circ\text{C}$
Temperature Coefficient of I_{SC}	βt		-	0.18	-	$\%/\text{ }^\circ\text{C}$
Spectral Sensitivity	λ		700	1050		nm
Peak Emission Wavelength	λ_P		-	940	-	nm
Half Angle	$\Delta\theta$		-	± 70	-	deg

Note 1. Source: Tungsten filament lamp 2856°K

