

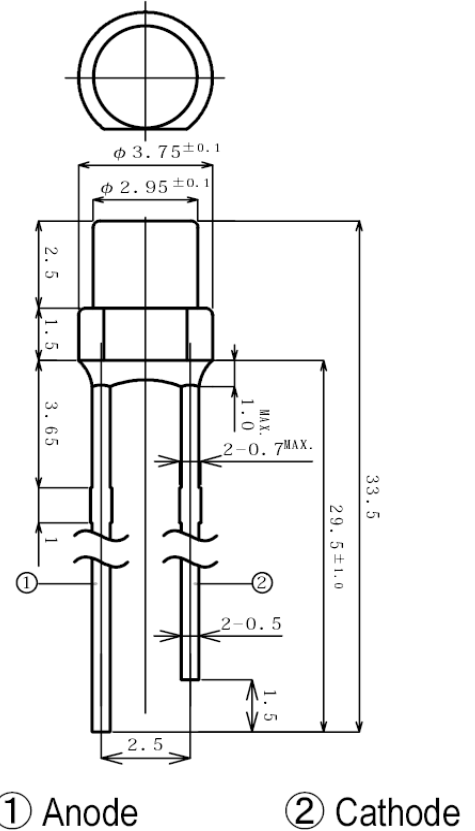
MTD1350

Features

High reliability
 Low dark current
 Narrow angular response
 Ultra high speed

Applications

Optical switches
 Edge sensing
 Smoke detectors



Maximum Ratings ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Max.	Test Condition	Unit
Reverse Voltage	V_R	20	-	V
Power Dissipation	P_D	50.00	-	mW
Operating Temperature	T_{opr}	-20 ~ +85	-	$^\circ\text{C}$
Storage Temperature	T_{stg}	-30 ~ +100	-	$^\circ\text{C}$
Junction Temperature	T_j	+100 $^\circ$	-	$^\circ\text{C}$
Soldering Temperature	T_{sol}	260 $^\circ$	for 5 sec. max	$^\circ\text{C}$

Opto-Electrical Characteristics ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Open Circuit Voltage	V_{oc}	-	-	-	-	V
Light Current	I_L	$V_R=10V, E_e=5\text{mW}/\text{cm}^2$ *	18.00	23.00	-	μA
Dark Current	I_D	$V_R=10V$	-	-	10	nA
Spectral Sensitivity	λ	-	-	400~1100	-	μA
Peak Sensitivity Wavelength	λ_p	-	-	940	-	V
Beam Angle	θ	-	-	$\pm 65^\circ$	-	deg.
Responsivity	R_i	$V_f=0V= 450\text{mm}$	-	.20	-	A/W
Junction Capacitance	C_j	1MHz, $V_R=2.5V$	-	6	-	pF

*Color Temperature = 2870 $^\circ\text{K}$ Standard Tungsten Lamp
 Specifications are subject to change without notice.

MTD1350 Graphs

