Marktech Optoelectronics

MTD3010PN

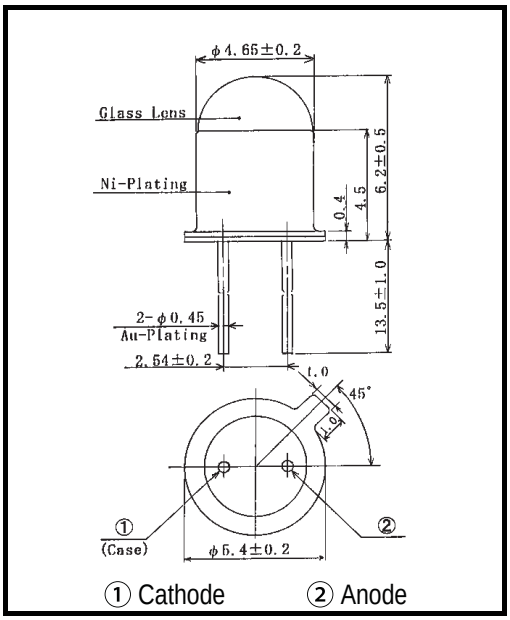
Photo Diode

Features:

- Narrow Angular Response
- Low Dark Current
- Linearity of Ee vs IL
- Optical Grade Glass
- High Reliability in Demanding Environments

Applications:

- Optical Switches
- Edge Sensing
- Fiber Optic Communications
- Smoke Detectors



Dimensions (Unit:mm)

Absolute Maximum Ratings (Ta=25°C)

Items	Symbol	Ratings	Unit
Reverse Voltage	VR	30	V
Power Dissipation	PD	100	mW
Operating Temperature	Topr	-30 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +125	°C
Junction Temperature	Tj	125	°C
Lead Soldering Temp*1	Tsol	260	°C

*1: Time 5 Sec max, Position: Up to 3mm from the body.

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Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Conditions	Min	Typ	Max	Unit
Open Circuit Voltage	Voc	Ee=5mW/cm^2	0.35	--	--	V
Light Current	IL	Vr=10V, Ee=5mW/cm^2	--	100	--	μA
Dark Current	ID	Vr=10V	--	--	10	nA
Curve Factor	CF	Ee=5mW/cm^2	0.55	--	--	--
Spectral Sensitivity	λ	--	--	400~1100	--	nm
Peak Sensitivity Wavelength	λp	--	--	900	--	nm
Responsivity	Rt	Vr=0Vλ =450mm	--	0.18	--	A/W
Responsivity	Rt	Vr=0Vλ =900mm	--	0.58	--	A/W
Angular Response	θ	--	--	±8	--	deg.
Junction Capacitance	Cj	1MHz, V=0V	--	60	100	pF

*Color Temperature=2870°K Standard Tungsten Lamp

Graphs: