Marktech Optoelectronics

High Speed InGaAs PIN Photodiode

Product No: **MTD6013D3-PD**

Sensitivity Wavelength Range: 750nm ~ 1750nm

The MTD6013D3 is a photodiode in a water-clear 3mm plastic package. It is well suited for high reliability and high sensitivity applications. Custom package solutions and sorting are also available.



FEATURES

> High Speed Response (Max: 2Gbps)
> 3mm Plastic Package
> Active Area of 0.5mm / High Sensitivity
> Spectral Range: 750nm - 1750nm

APPLICATIONS

> High Speed Optical Communications
> Industrial Controls
> Optical Switches
> LIDAR
> Medical

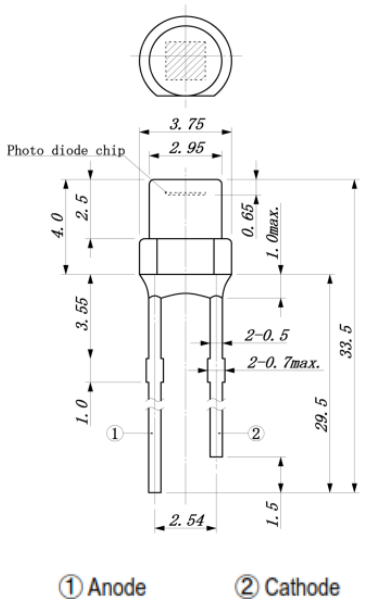
Absolute Maximum Ratings (Ta=25°C)

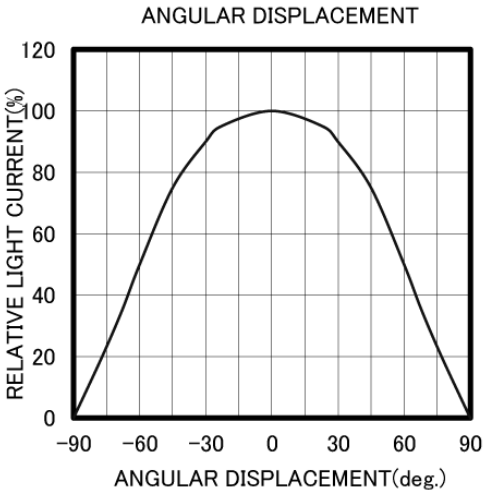
ITEMS	SYMBOL	RATINGS	UNIT
Active Area	Φ	0.5	mm
Operating Temperature Range	Topr	-20 to +85	°C
Storage Temperature Range	Tstg	-30 to +100	°C

Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown Voltage	VR	IR=10uA	--	--	2	V
Sensitivity Range	λ	VR=0V	750	--	1750	nm
Dark Current	ID	VR=1V	--	--	1	uA
Junction Capacitance	C	VR=0V	--	23	--	pF
Junction Capacitance	C	VR=1V	--	17	--	pF
Light Current @λ=1300nm	IL	If=10mA	--	3	--	uA
Light Current @λ=1300nm	IL	If=20mA	--	5	--	uA
Responsivity	R	λ=1600nm	--	0.46	--	A/W
Quantum Efficiency	QE	λ=1600nm	35	--	--	%
Shunt Resistance	RSH	VR=10mV	--	8.8	--	MΩ
Switching Times	Tr, Tf	VR=2V	--	0.3	--	ns

2022-12-08

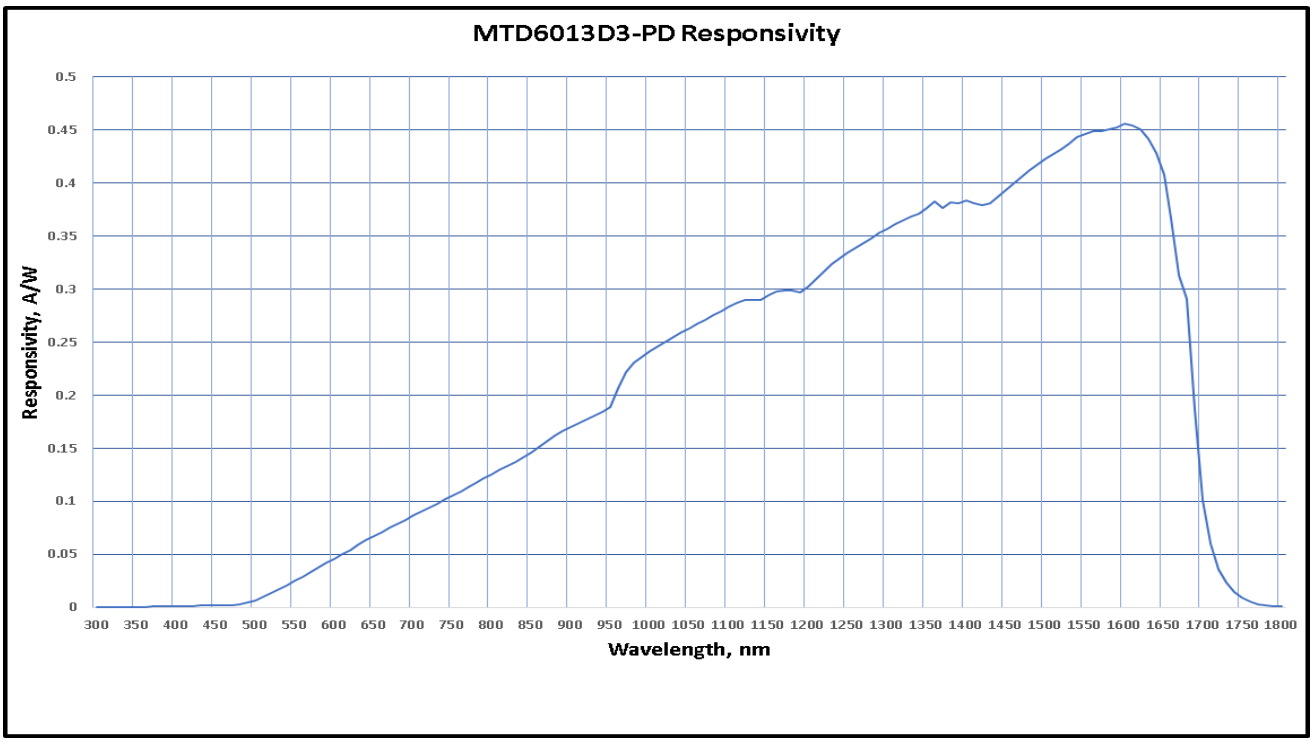


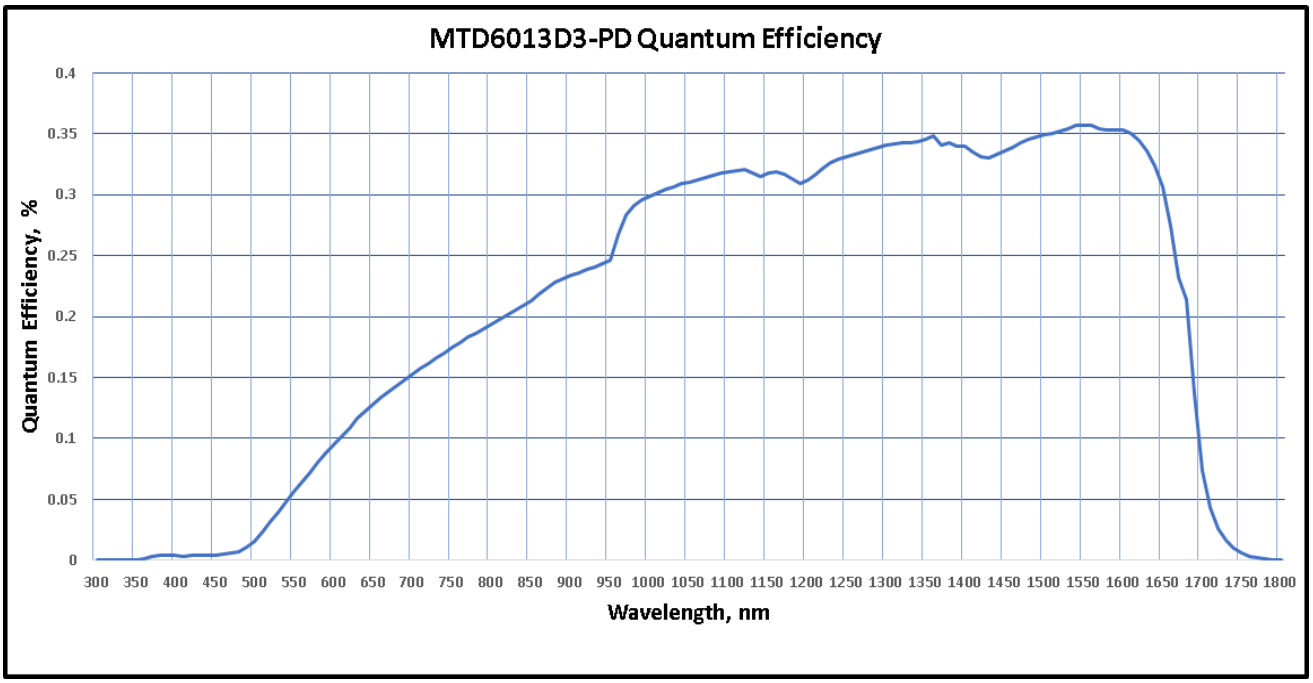


Unit: mm, Tolerance: ±0.2

The information contained herein is subject to change without notice.

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