Preliminary

Marktech Optoelectronics

High Speed InGaAs PIN Photodiode

Product No: **MTPD3001D3-030**

Sensitivity Wavelength Range: 750nm ~ 1750nm



FEATURES

> High Speed Response (Max:2Gbps)
> 3mm Plastic Package
> Active Area of 0.30mm / High Sensitivity
> Spectral Response Range: 750nm - 1750nm

APPLICATIONS

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

Absolute Maximum Ratings (Ta=25°C)

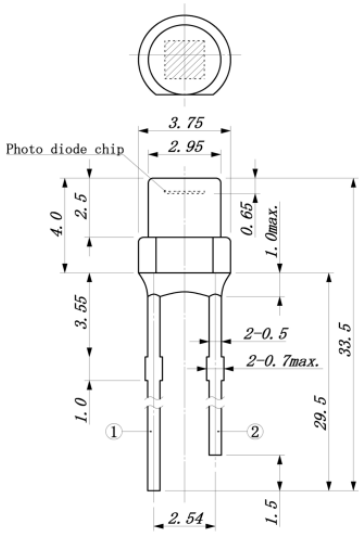
ITEMS	SYMBOL	RATINGS	UNIT
Active Area	Φ	0.3	mm
Operating Temperature Range	Topr	-20 to +85	°C
Storage Temperature Range	Tstg	-30 to +100	°C

Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown Voltage	VR	IR=10uA	2	--	--	V
Sensitivity Range	λ		750	--	1750	nm
Dark Current	ID	VR=0V	--	0.1	--	nA
Dark Current	ID	VR=1V	--	10	--	nA
Junction Capacitance	C	VR=0V	--	12.5	--	pF
Junction Capacitance	C	VR=1V	--	10	--	pF
Light Current @λ=1300nm	IL	If=10mA	--	3	--	uA
Light Current @λ=1300nm	IL	If=20mA	--	5	--	uA
Responsivity	R	λ=1560nm	--	0.37	--	A/W
Quantum Efficiency	QE	λ=1310nm	30	--	--	%
Shunt Resistance	RSH	VR=10mV	--	18	--	MΩ
Switching Times	Tr, Tf	VR=2V	--	0.3	--	ns

2023-03-27

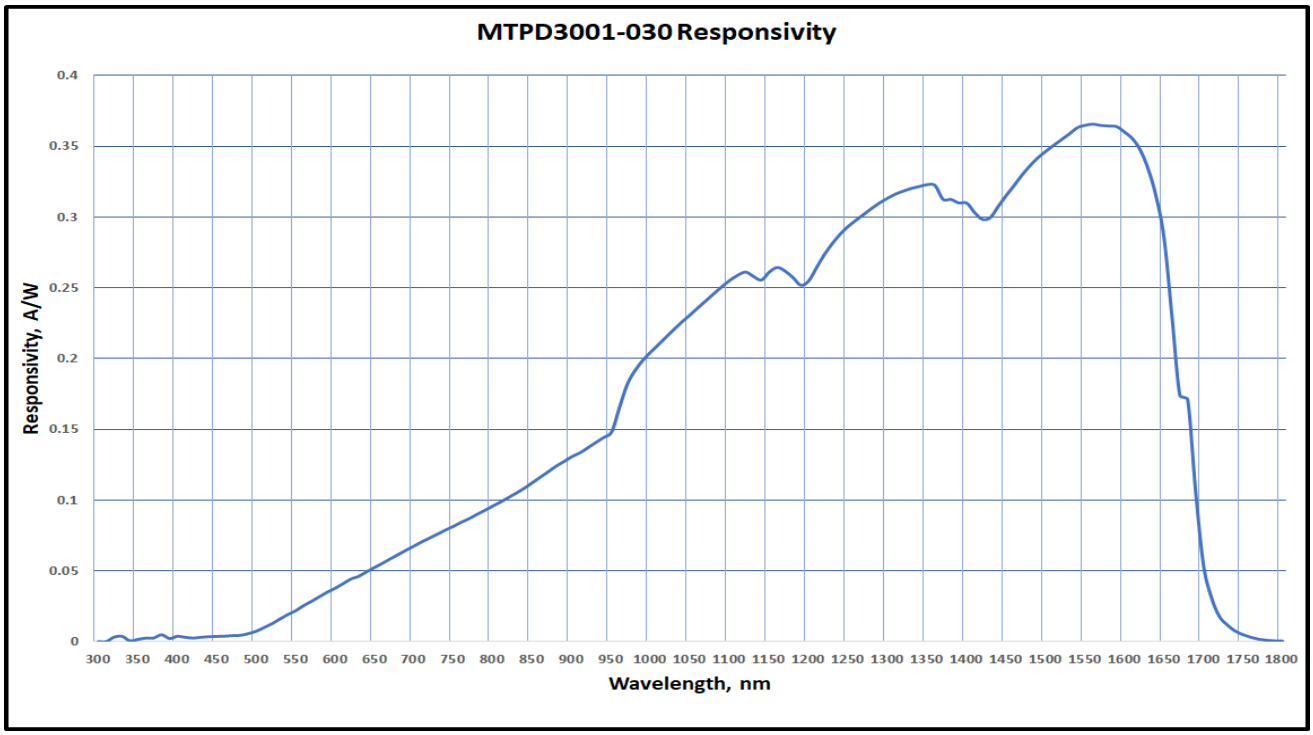
Global Headquarters, 3 Northway Lane North, Latham, NY 12110, USA **www.marktechopto.com**
TOLL FREE: 1-800-984-5337 • **PHONE:** 518-956-2980 • **FAX:** 518-785-4725 • **EMAIL:** info@marktechopto.com

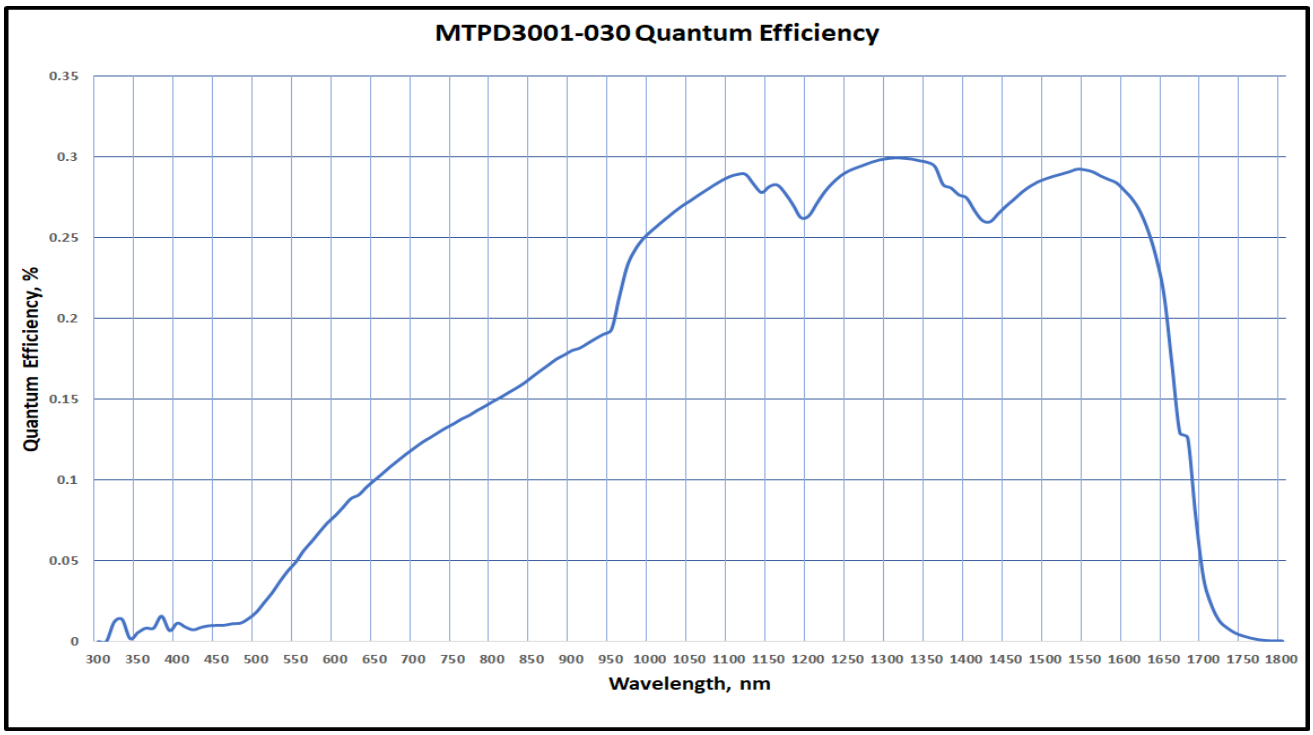


Unit: mm, Tolerance: ±0.2

The information contained herein is subject to change without notice.

2023-03-27





The information contained herein is subject to change without notice.

2023-03-27

Global Headquarters, 3 Northway Lane North, Latham, NY 12110, USA **www.marktechopto.com**
TOLL FREE: 1-800-984-5337 • **PHONE:** 518-956-2980 • **FAX:** 518-785-4725 • **EMAIL:** info@marktechopto.com

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

Marktech Optoelectronics:

MTPD3001D5-030 MTE7063NK2-UR MTRS0012C MTRS7010C MTE1300N MTE4110D4 MTE8800N1 MTAPD-06-001 MTD6000PT-T MTE325H21-UV MTE340F13-UV MTE8600MC MTSM5416SMR2S MTPS3085WC1 MT5470E-OR MTD3910G-F3 MTE4110C5 MTPS3085SMR1-IR MT2118-G-A MTE340F11-UV MTE4600P-C MTE8008N3 MTPD1346D-010 MTSM6414SMR2S MTAPD-06-009 MTE8560P-C MTE8600N2 MTD3910W MTE6114C2 MTE8800W