## Preliminary



Product No: MTSM2601SMF2-SP4-030

#### Sensitivity Wavelength Range: 800nm ~ 2600nm

The MTSM2601SMF2-SP4-030, a high sensitivity and high reliability product series, is ideally suited for Optical Communication devices. Custom packaging options for this die are also available.

#### FEATURES

- > High Speed Response 1.0GHz
- > 5mm x 5mm Seam Welded Surface Mount Package
- > Total Chip Area of 1.9mm x 1.9mm / High Sensitivity > Optical Switches
- > Spectral Range: 800nm 2600nm
- > 4 Individual 0.3mm active area photodiodes
- > High Speed Optical Communications > Industrial Controls

APPLICATIONS

- > LIDAR
- > Medical



### Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
Active Area	Φ	0.3mm x 4	mm
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +125	°C

#### Electrical & Optical Characteristics ( $Ta = 25^{\circ}C$ )

ITEMS	SYMBOL	CONDITIONS	MIN	ТҮР	MAX	UNIT
Breakdown Voltage	VR	IR=100uA			1	V
Sensitivity Range	λ	VR=0V	800		2600	nm
Dark Current	ID	VR=0V		120		nA
Dark Current	ID	VR=1V		100		uA
Capacitance	С	VR=0V		150		pF
Capacitance	С	VR=1V		20		pF
Responsivity	R	λ=2400nm		1.24		A/W
Shunt Resistance	RS	VR=10mV		3.4		kOhm
Quantum Efficiency	QE	λ=1840nm		72		%

\*1: Device specifications are (Per Element)

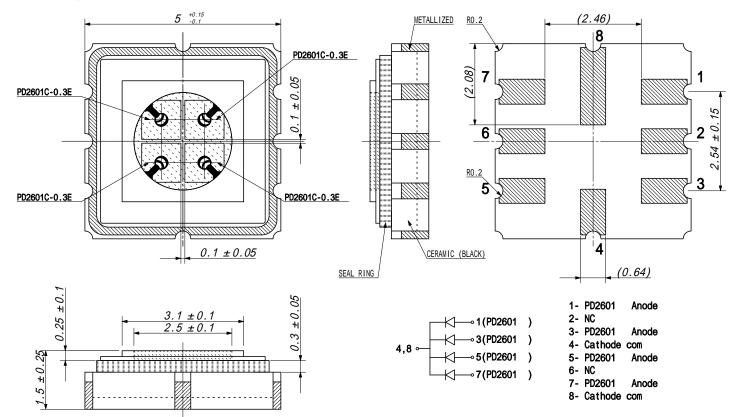
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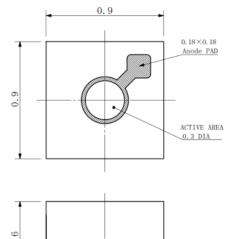


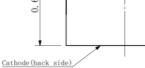
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### **Package Dimensions**



#### **Die Dimensions**





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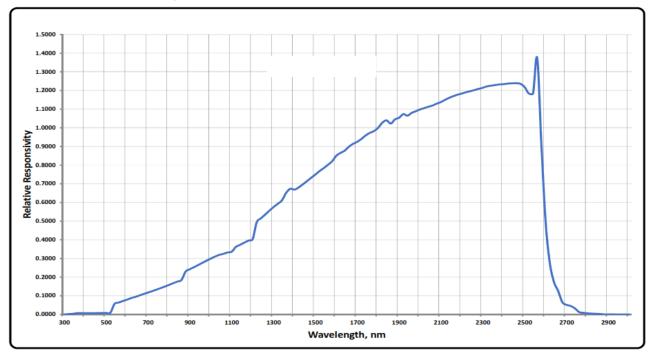
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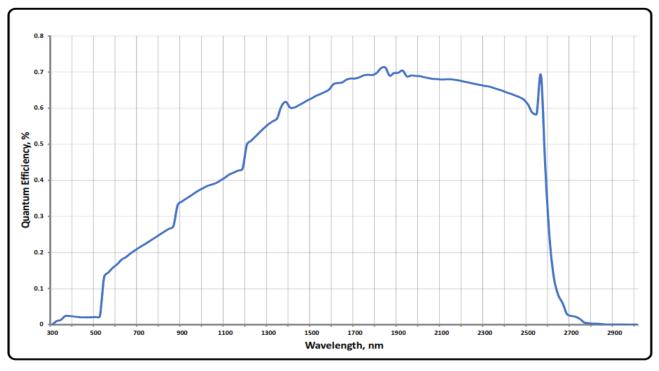
# **Marktech** 4 Segment Quad InGaAs PIN Photodiode

Product No: MTSM2601SMF2-SP4-030

### **Spectral Responsivity**



### **Quantum Efficiency**

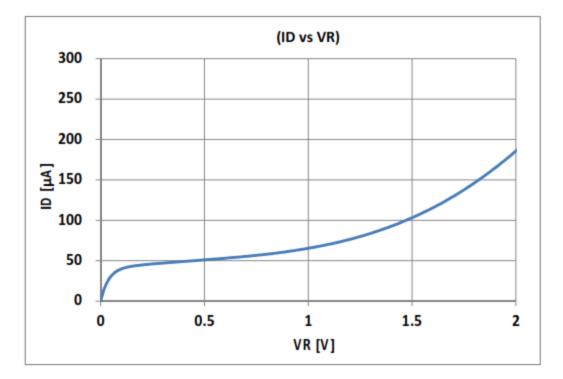


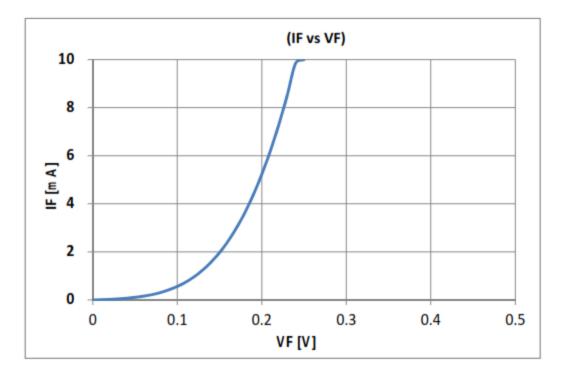
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Product No: MTSM2601SMF2-SP4-030





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