

Product No: MTSM2601SMF3-300

## Sensitivity Wavelength Range: 800nm~2600nm

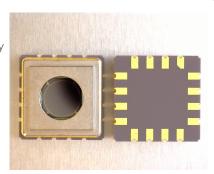
The MTSM2601SMF3-300 from Marktech, a high sensitivity and high reliability product series, is ideally suited for Optical Communication devices. Custom packaging options for this die is also available.

### **FEATURES**

- > High Speed Response
- > 7.24 x 7.24mm Hermetically Sealed Package
- > Active Area of 3.0mm  $\Phi$  / High Sensitivity
- > Spectral Range 800nm 2600nm

### **APPLICATIONS**

- > High Speed Optical Communications
- > Industrial Controls
- > Gas/Water Analysis
- > LIDAR
- > Medical



Absolute Maximum	Ph			
ITEMS	SYMBOL	RATINGS	UNIT	lead-free RoHS
Active Area	Ф	3.0	mm	
Operating Temperature Range	Topr	-40 to +85	°C	
Storage Temperature Range	Tstg	-40 to +125	°C	

Electrical & Optical Characteristics (Ta = 25°C)									
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT			
Breakdown Voltage	VR	IR=100uA			1	V			
Sensitivity Range	λ	VR=0V	800		2600	nm			
Dark Current	ID	VR=0V		80		nA			
Dark Current	ID	VR=1V		770		uA			
Capacitance	С	VR=0 <b>V</b>		3100		pF			
Capacitance	С	VR=1V		500		pF			
Responsivity	R	λ=2400nm		1.24		A/W			
Shunt Resistance	RS	VR=10mV		0.5		kOhm			
Quantum Efficiency	QE	λ=1840nm		72		%			

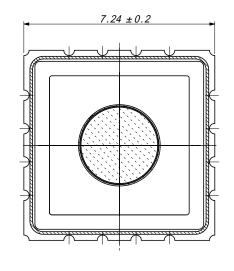
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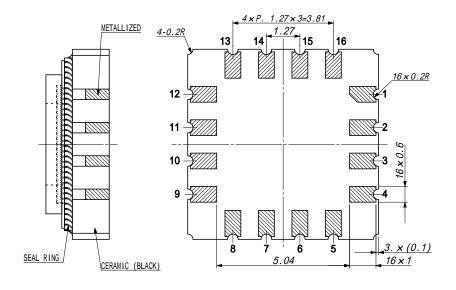


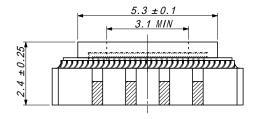
Optoelectronics

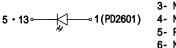
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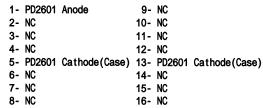
# **Package Dimensions**





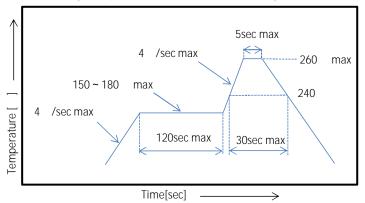


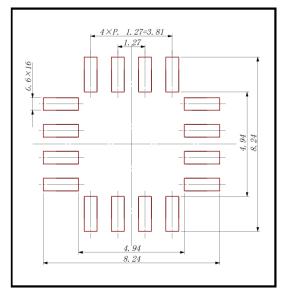




Recommended Soldering Pattern [mm]

### Reflow Soldering Temperature-Profile [Pb free Soldering] (Recommend condition)





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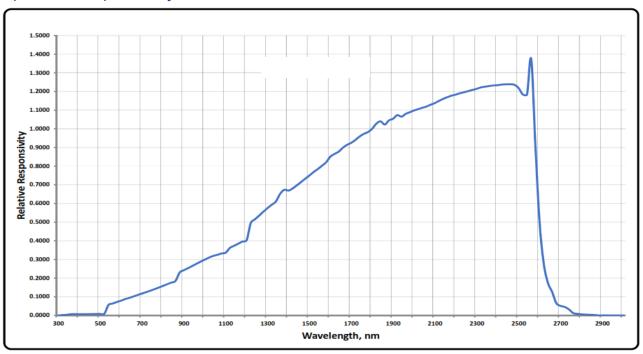
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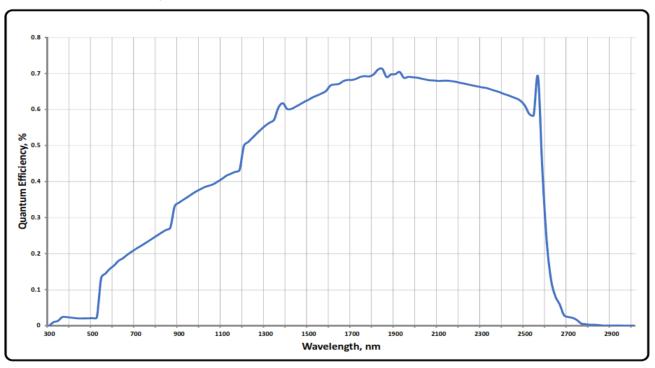
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# **Spectral Responsivity**



# Quantum Efficiency

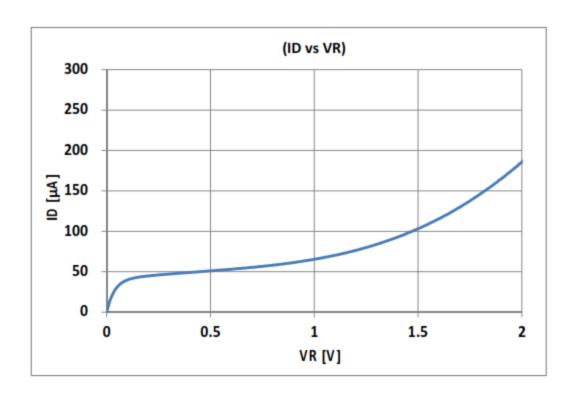


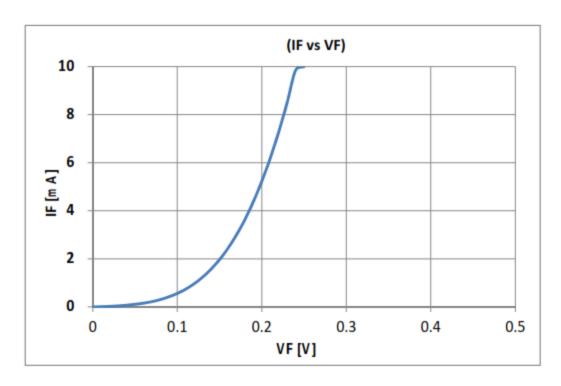
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