

Sensitivity Wavelength Range: 800nm ~ 2600nm

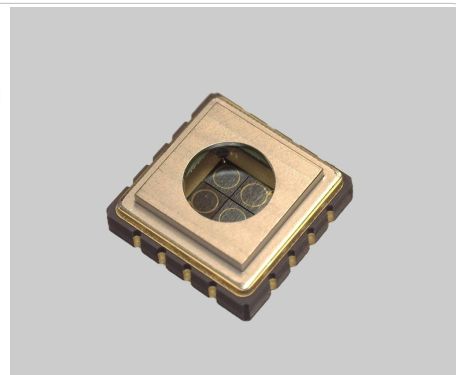
The MTSM2601SMF3-SP4-100, a high sensitivity and high reliability product series, is ideally suited for Optical Communication devices. Custom packaging options for this die are also available.

FEATURES

- > High Speed Response - 1.0GHz
- > 7.24mm x 7.24 Seam Welded Surface Mount Package
- > Total Chip Area of 2.9mm x 2.9mm / High Sensitivity
- > Spectral Range: 800nm - 2600nm
- > 4 Individual 1.0mm active area photodiodes

APPLICATIONS

- > High Speed Optical Communications
- > Optical Beam Positioning
- > Laser Alignment
- > LIDAR
- > Medical



Absolute Maximum Ratings (Ta=25°C)

ITEMS	SYMBOL	RATINGS	UNIT
Active Area	Φ	1.0mm x 4	mm
Operating Temperature Range	Topr	-40 to +85	°C
Storage Temperature Range	Tstg	-40 to +125	°C

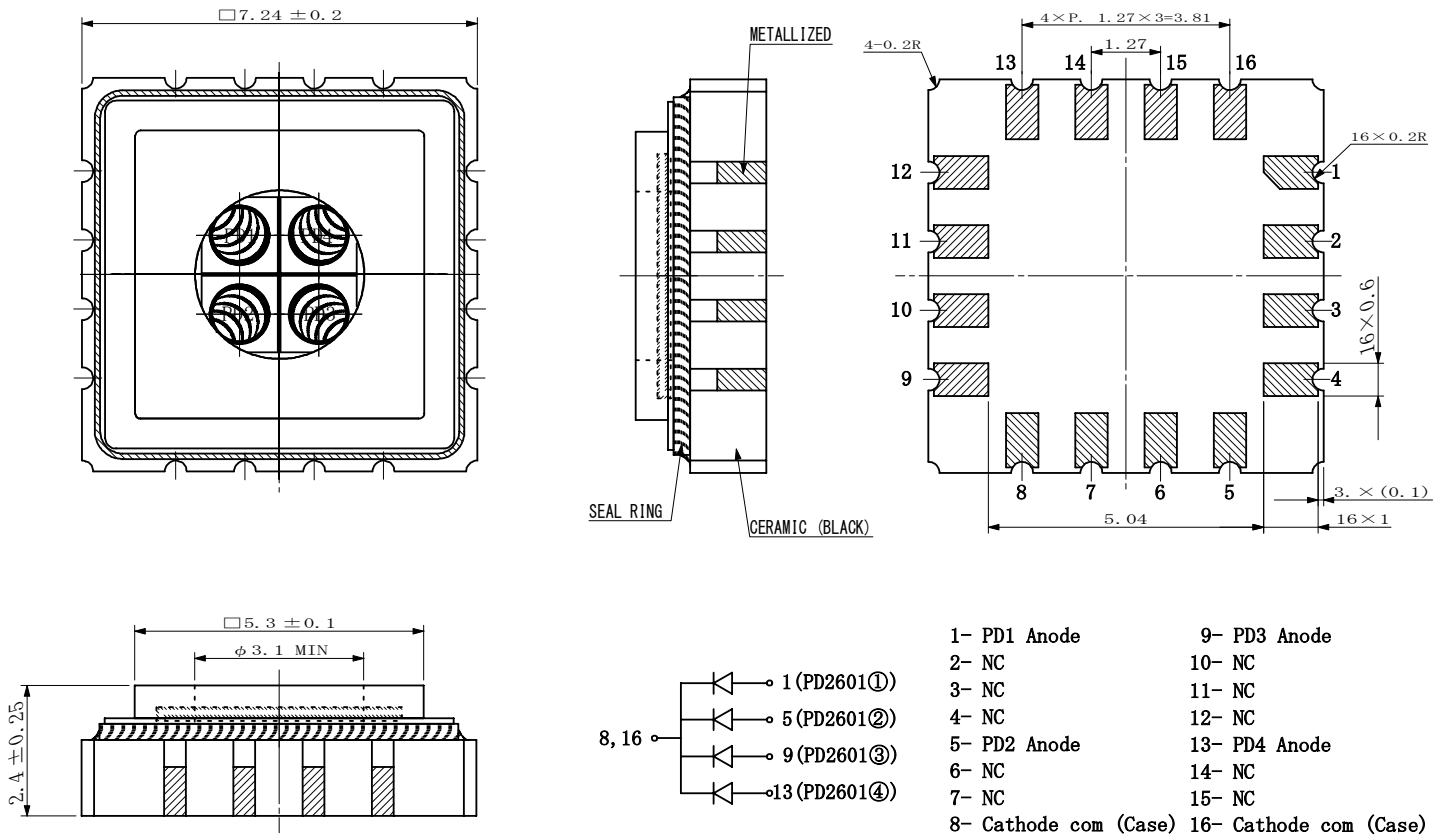
Note: Also available on PCB - Starboard MTSM2601SMF3-SP4-100S (See Page 3)

Electrical & Optical Characteristics (Ta = 25°C)

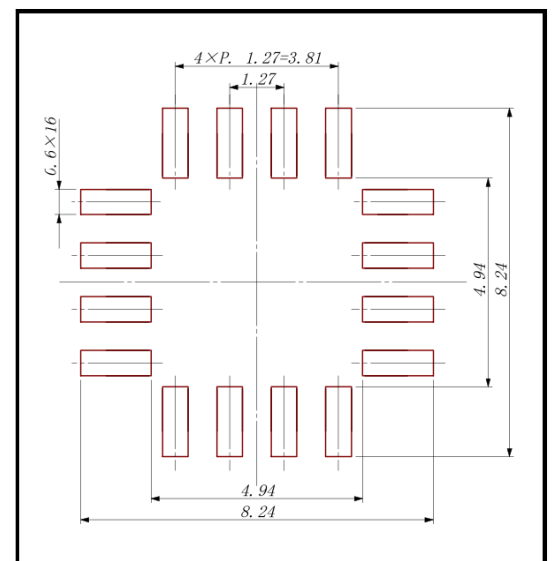
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Breakdown Voltage	VR	IR=100uA	--	--	1	V
Sensitivity Range	λ	VR=0V	800	--	2600	nm
Dark Current	ID	VR=0V	--	23	--	nA
Dark Current	ID	VR=1V	--	72	--	uA
Capacitance	C	VR=0V	--	750	--	pF
Capacitance	C	VR=1V	--	60	--	pF
Responsivity	R	λ =2400nm	--	1.24	--	A/W
Shunt Resistance	RS	VR=10mV	--	6	--	kOhm
Quantum Efficiency	QE	λ =1840nm	--	72	--	%

*1: Device specifications are (Per Element)

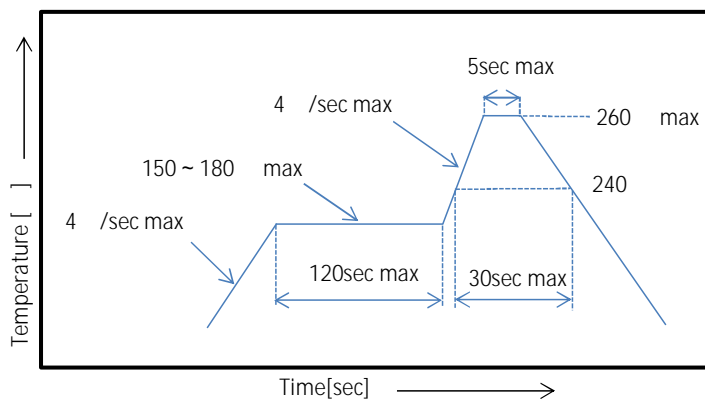
Package Dimensions



Recommended Soldering Pattern [mm]



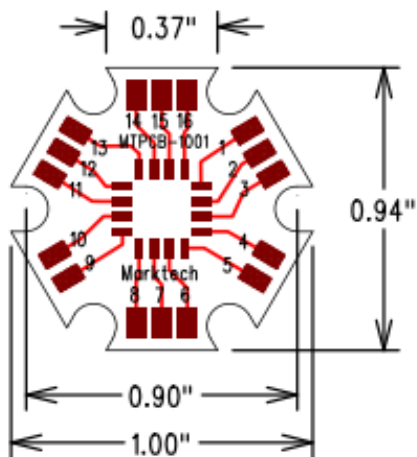
Reflow Soldering Temperature-Profile [Pb free Soldering] (Recommend condition)



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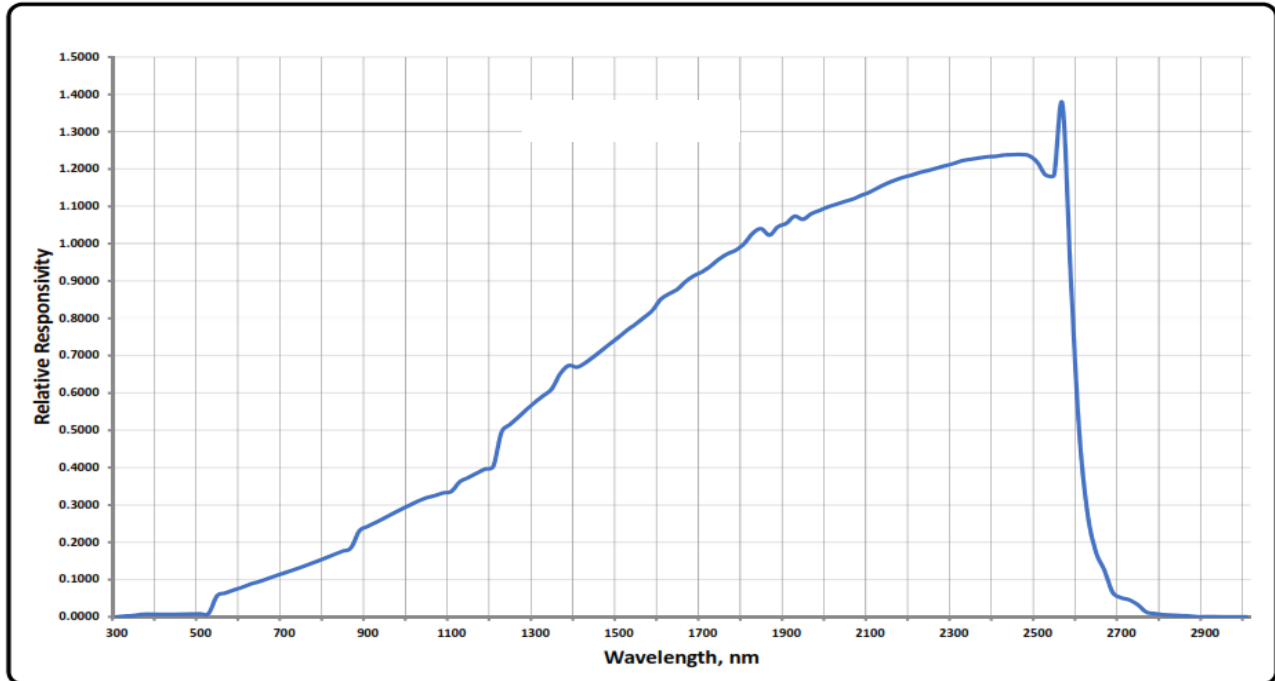
Starboard Dimensions



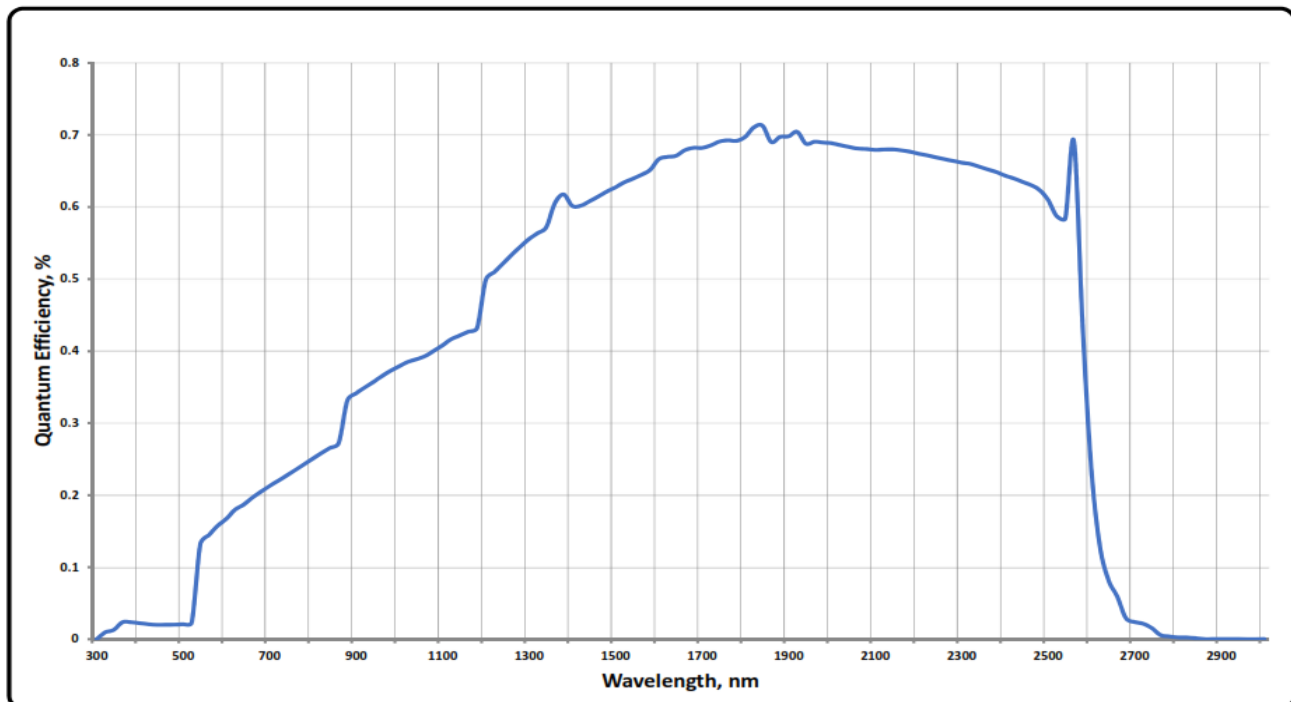
- | | |
|-------------------|--------------------|
| 1- NC | 9- NC |
| 2- NC | 10- NC |
| 3- NC | 11- NC |
| 4- Anode | 12- Anode |
| 5- Cathode (Case) | 13- Cathode (Case) |
| 6- NC | 14- NC |
| 7- NC | 15- NC |
| 8- Anode | 16- Anode |

Aluminum Core Board 0.040" (1.02mm) Thickness
Overall Board Dimensions: +/- 0.010" (0.254mm)

Spectral Responsivity

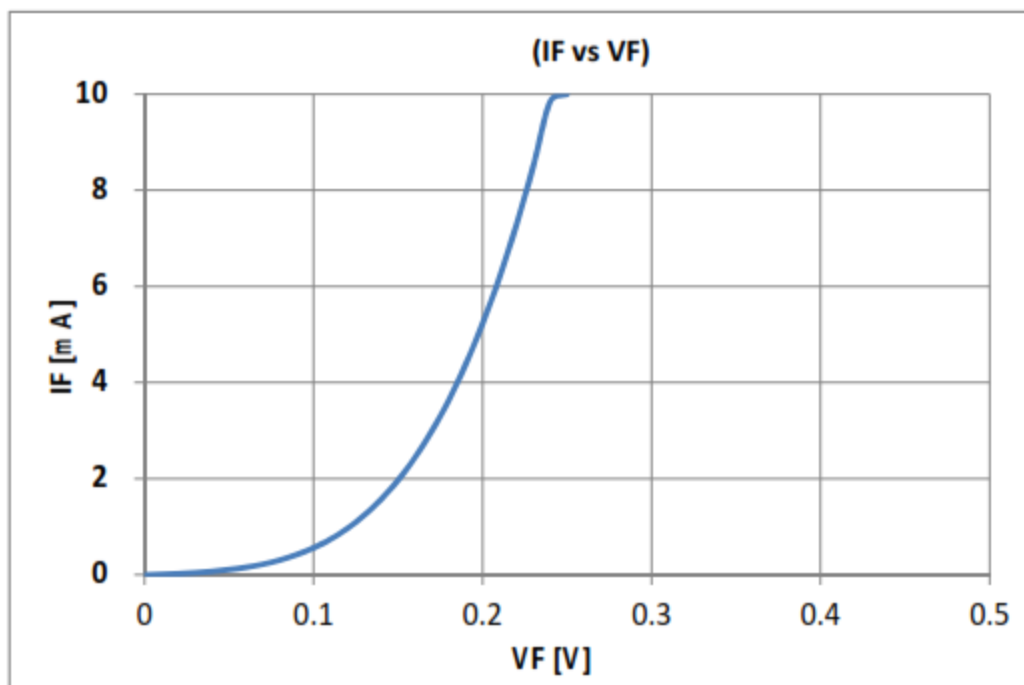
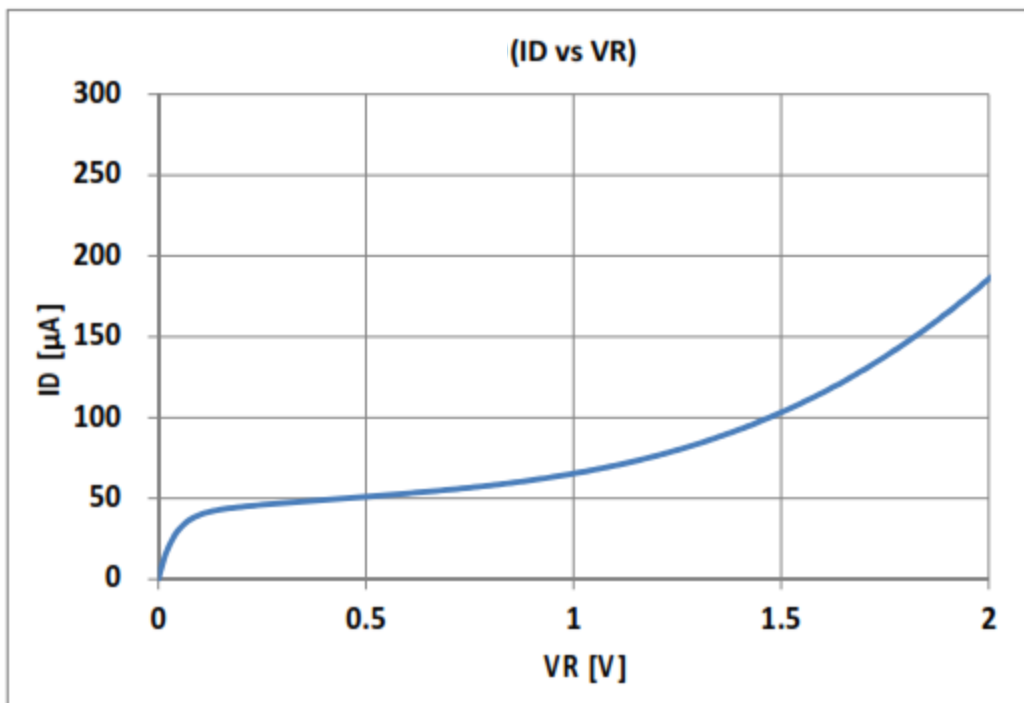


Quantum Efficiency



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