

## Enhanced Sensitivity Wavelength: 350nm-1100nm

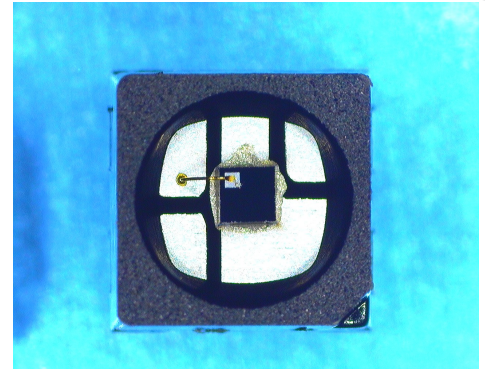
The MT03-071 is a Photodiode with a square 0.12mm<sup>2</sup> active area that is packaged in a 2.1mm square SMD package. It is specifically designed for laser monitoring of wave lengths from Blue/Green through IR where applications requiring high signal and low noise.

### FEATURES

- > Ultra low noise
- > High Shunt Resistance
- > Wide Dynamic Range
- > Blue/Green Enhanced Silicon

### APPLICATIONS

- > Laser Monitoring
- > Currency Authentican
- > Spectroscopy
- > Fluorescence



## Absolute Maximum Ratings



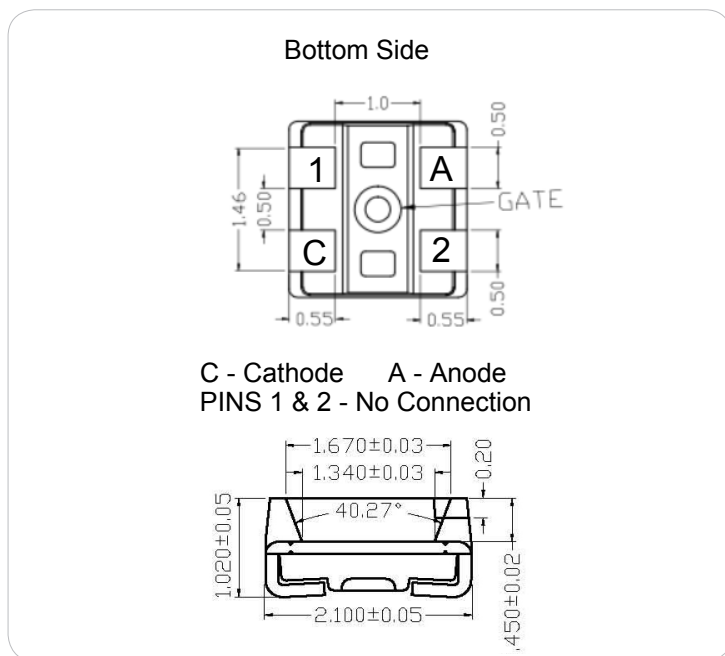
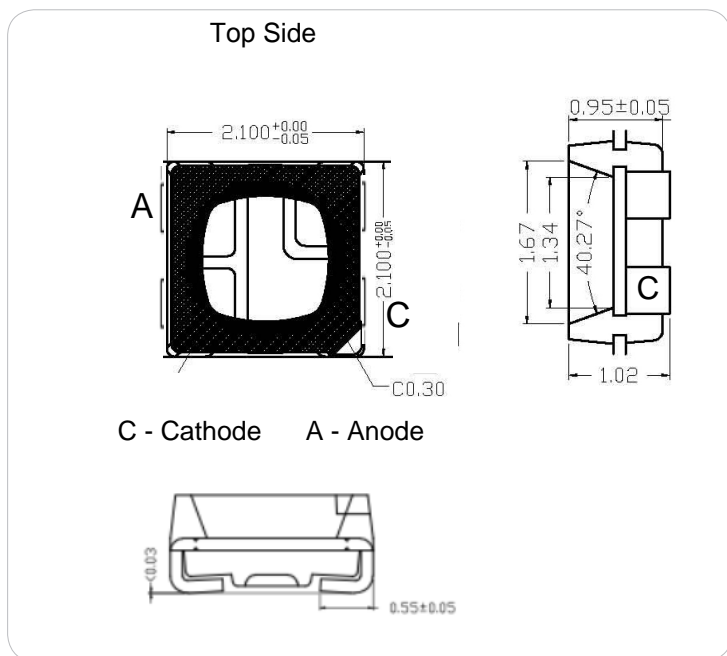
ITEMS	SYMBOL	RATINGS	UNIT
Reverse Voltage	Vr	30	V
Operating Temperature Range	Topr	-40 ~ +100	°C
Storage Temperature Range	Tstg	-55 ~ +125	°C

## Electrical & Optical Characteristics (Ta = 25°C)

ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Dark Current	Id	Vr=5V	--	0.05	1.0	nA
Forward Voltage	Vf	If=2mA	--	--	0.8	V
Breakdown Voltage	Vb	Ir=10uA	50	--	--	V
Spectral Sensivity Range	λ		350		1100	nm
Peak Sensivity Wavelength	λp		--	950	--	nm
Responsivity	Rt	Vr=0V, λ=410nm	--	0.19	--	A/W
Responsivity	Rt	Vr=0V, λ=940nm	--	0.55	--	A/W
Shunt Resistance	Rs	Vr=10V	1000	5000	--	mΩ
Junction Capacitance	Cj	Vr=0V	--	3.0	3.5	pF
Junction Capacitance	Cj	Vr=10V	--	1.0	1.5	pF
Response Time @410nm	Tr	Vr=10V, RL=1kΩ	--	20.0	--	ns
Photocurrent *	Iph	Vr=10V, Ee=5mW/cm2	--	2.7	--	uA

\* Temperature = 2870 °K Standard Tungsten Lamp

## Package Dimensions



## Responsivity

