

# Silicon Carbide Photodiode

Product No: MT12-001

### Sensitivity Wavelength Range: 220nm ~ 358nm

The MT12-001 is a square (0.46mm x 0.46mm) 0.21mm<sup>2</sup> active area Silicon Carbide Photodiode in an isolated, hermetic TO-46 package with a UV transmitting glass window. Custom packaging options for this die are available

#### **FEATURES**

- > Hermetically Sealed Package
- > TO-46 Can Package
- > High Sensitivity
- > Spectral Range: 220nm 358nm



Absolute Maximum Ratings (Ta=25°C)							
ITEMS	SYMBOL	RATINGS	UNIT				
Operating Temperature Range	Topr		°C				
Storage Temperature Range	Tstg	-55 to +170	°C				
Reverse Breakdown Voltage	Vr	50	V				

Electrical & Optical Characteristics (Ta = 25°C)									
ITEMS	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT			
Responsivity	R	$\lambda$ =220nm		0.013		A/W			
Responsivity	R	$\lambda$ =280nm		0.13		A/W			
Responsivity	R	λ=358nm		0.013		A/W			
Dark Current	Id	VR=1V		0.1	10	рА			
Sensitivity Range	λ	VR=0V	220		358	nm			
Breakdown Voltage	V(BR)	IR=10uA	50			V			
Serial Capacitance	Cs	V=0V, 1MHz		3.5		рF			

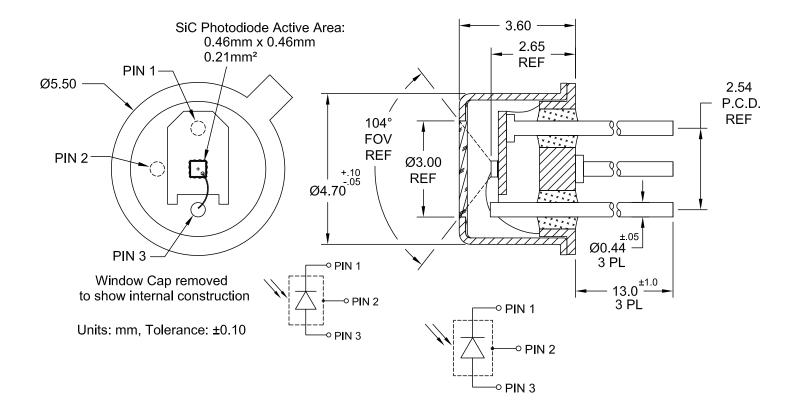
2024-09-10





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### **Package Dimensions**



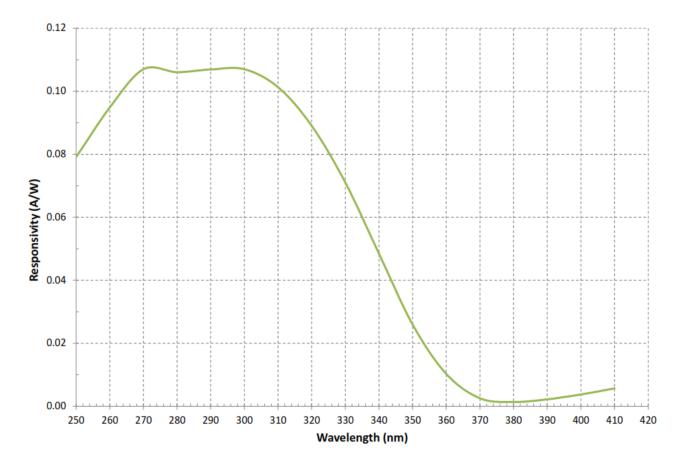
The information contained herein is subject to change without notice.





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## Responsivity



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