# Photodiode Φ5 mm



### **FEATURES**

- Circular Active Area
- Ideal for EUV Detection
- High Speed
- Grid lines 5 microns, Pitch 100 microns
- Superior Radiation Hardness
- High Photon Flux Robustness
- TO-8 package
- Protective Cover Plate<sup>3</sup>

### **Electro-Optical Characteristics at 25 °C**

Parameters	Test Conditions	Min	Тур	Max	Units
Active Area	Ф5.01 mm		20		mm <sup>2</sup>
Responsivity	(see graph on next page)				A/W
Reverse Breakdown Voltage, V <sub>R</sub>	Ι <sub>R</sub> = 1 μΑ	160			Volts
Capacitance, C	V <sub>R</sub> = 0 V		200	800	pF
Rise Time	$R_L = 50 \Omega, V_R = 150 V$			3.5	nsec
Dark Current	V <sub>R</sub> = 150 V			100	nA

#### **Thermal Parameters**

Storage and Operating Temperature Range	Units		
Ambient <sup>1</sup>	-10 ° to 40 °C		
Nitrogen or Vacuum	-20 °C to 80 °C		
Lead Soldering Temperature <sup>2</sup>	260 °C		

<sup>&</sup>lt;sup>1</sup> Temperatures exceeding these parameters may create oxide growth on the active area.

Over time responsivity to low energy radiation and wavelengths below 150 nm will be compromised.

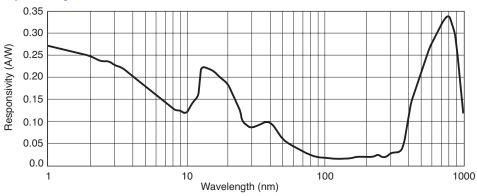
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<sup>&</sup>lt;sup>2</sup> 0.080" from case for 10 seconds.

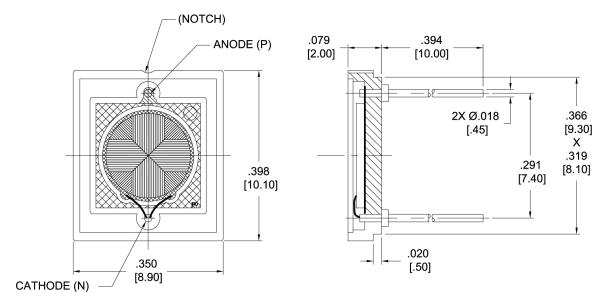
<sup>&</sup>lt;sup>3</sup> Shipped with temporary cover to protect the photodiode array and wire bonds. Review the Application Note, "Handling Precautions for AXUV, SXUV, and UVG Detectors", prior to removing cover.



# **Typical Photon Responsivity**



# **Package Information**



Dimensions are in inch [metric] units.

Specifications are subject to change without prior notice.

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