# Photodiode 1 mm<sup>2</sup>



#### **FEATURES**

- SMA Connector
- Ideal for Electron Detection
- Ultra-High Speed

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

Parameters	Test Conditions	Min	Тур	Max	Units
Active Area	1 mm x 1 mm		1		mm²
Responsivity	(see graphs on next page)				A/W
Reverse Breakdown Voltage, V <sub>R</sub>	I <sub>R</sub> = 1 μA	55			Volts
Capacitance, C	V <sub>R</sub> = 0 V		15	50	pF
Rise Time	RL = 50 Ω, V <sub>R</sub> = 52 V			700	psec
Dark Current	V <sub>R</sub> = 52 V		1	10	nA

#### **Thermal Parameters**

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

<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.

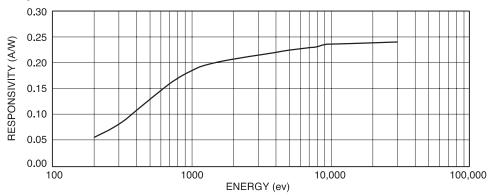
Maximum torque of 5 inch/pounds recommended.

Permanent damage will result if higher torque values are used and warranty is voided.

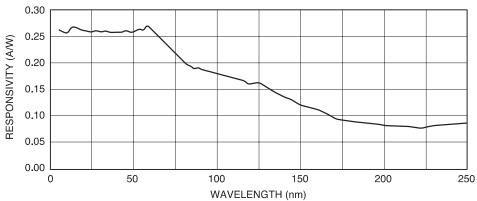
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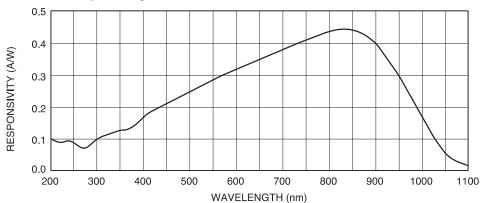
#### **Typical Electron Response**



# **Typical EUV-UV Photon Response**



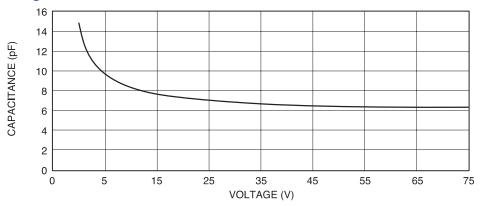
## **Typical UV-VIS-NIR Photon Responsivity**



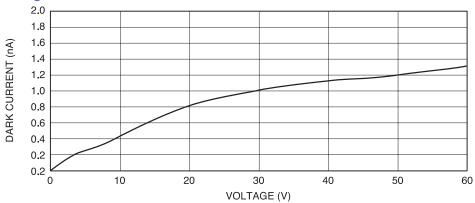
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## Capacitance vs. Voltage



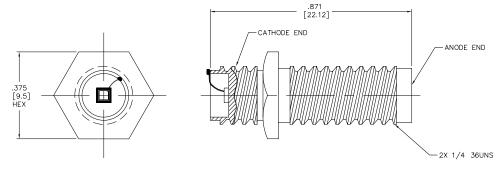
## **Dark Current vs. Voltage**



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# Photodiode 1 mm<sup>2</sup>

#### **Package Information**



Dimensions are in inch [metric] units.



REACH SVHC -This article contains Lead (Pb) > 0.1% as part of a copper alloy. WARNING: This product can expose you to Lead (as part of a copper alloy), which is known to the State of California to cause s cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Specifications are subject to change without prior notice.

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