

FEATURES

- 40 Pin Dual-In-Line Package
- Ideal for Electron Detection
- Protective Cover Plate³

Electro-Optical Characteristics at 25 °C

| Parameters | Test Conditions | Min | Typ | Max | Units |
|---|---------------------------|-----|-----|------|-----------------|
| Active Area | 2 mm x 5 mm | | 10 | | mm ² |
| Responsivity | (see graphs on next page) | | | | A/W |
| Reverse Breakdown Voltage, V _R | I _R = 1 μA | | 25 | | Volts |
| Capacitance, C | V _R = 0 V | | 700 | 2000 | pF |
| Rise Time | V _R = 0 V | | 500 | | nsec |
| Shunt Resistance (per element) | V _f = ± 10 mV | 100 | | | MOhms |

Thermal Parameters

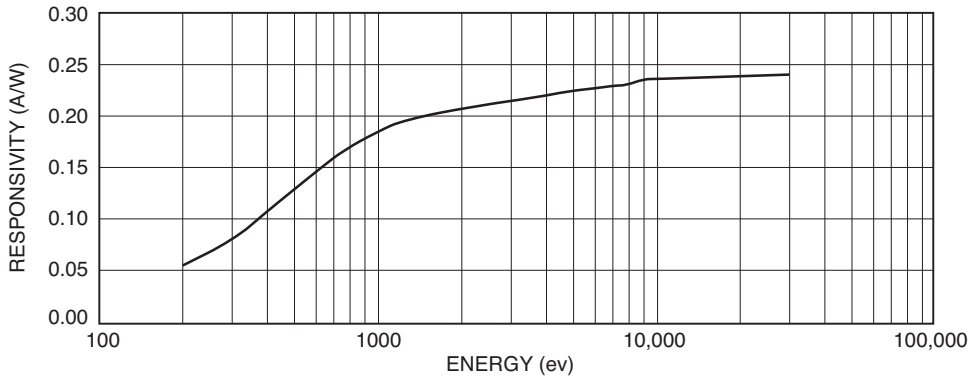
| Storage and Operating Temperature Range | Units |
|---|---------------|
| Ambient ¹ | -10°C to 40°C |
| Nitrogen or Vacuum | -20°C to 80°C |
| Maximum Junction Temperature | 70°C |
| Lead Soldering Temperature ² | 260°C |

¹ 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.

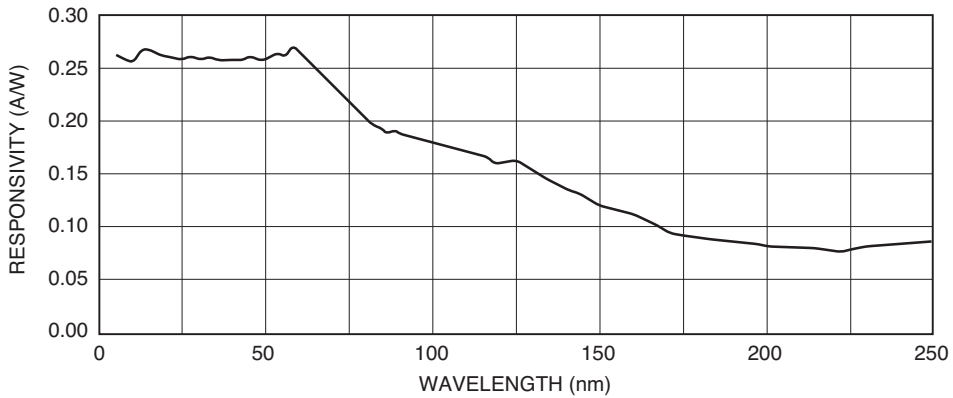
² 0.080" from case for 10 seconds.

³ 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.

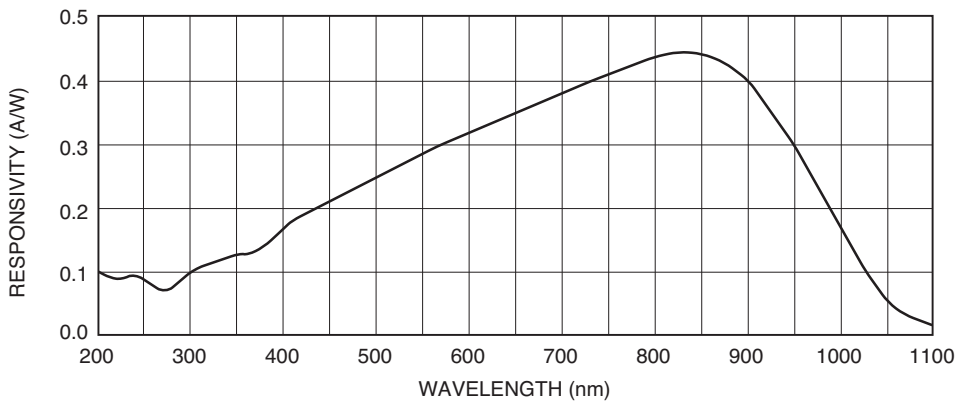
Typical Electron Response



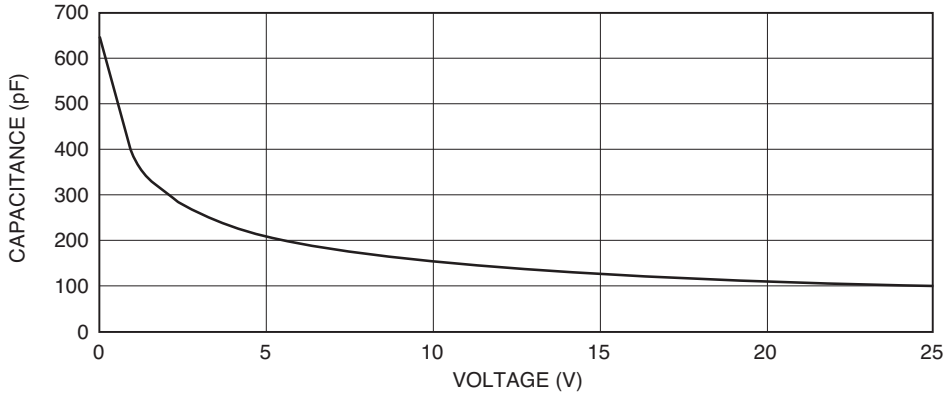
Typical EUV-UV Photon Response



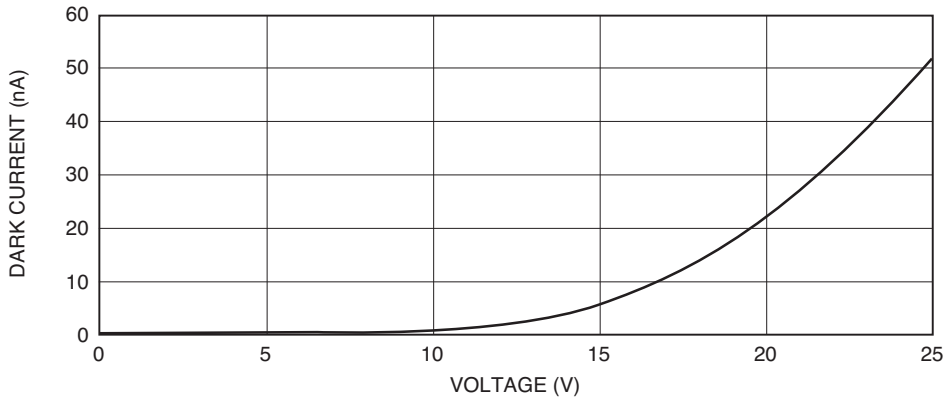
Typical UV-VIS-NIR Photon Responsivity



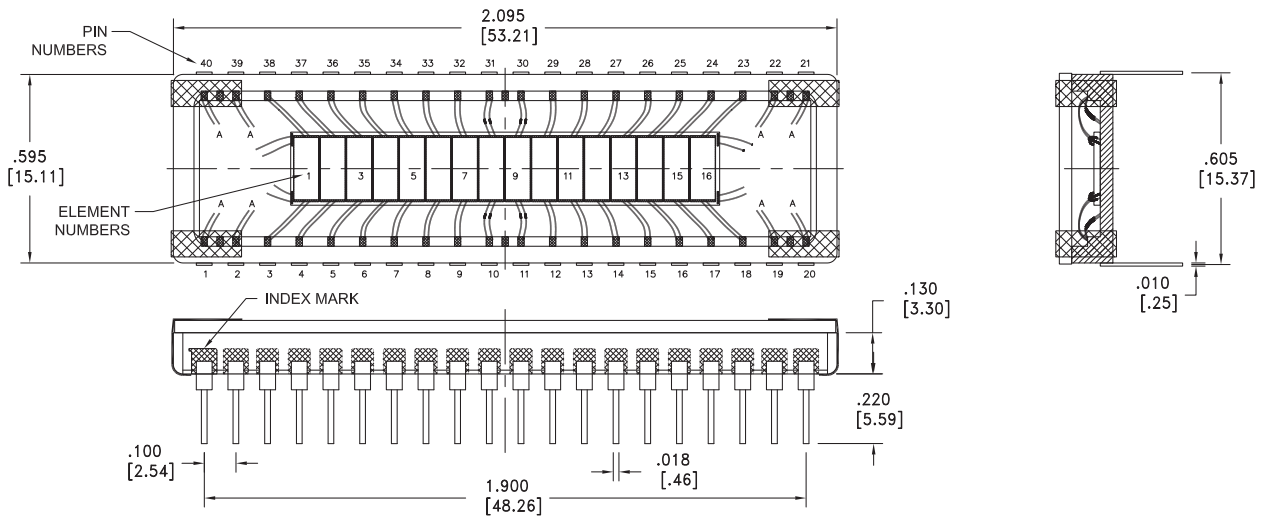
Capacitance vs. Voltage



Dark Current vs. Voltage



Package Information



Dimensions are in inch [metric] units.

Pin Description

| Pins | Connection | Pins | Connection |
|----------------|-------------------|--------|--------------------|
| 1, 2, 19, 20 | Common Anode | 11, 30 | Cathode Element 9 |
| 21, 22, 39, 40 | Common Anode | 12, 29 | Cathode Element 10 |
| 3, 38 | Cathode Element 1 | 13, 28 | Cathode Element 11 |
| 4, 37 | Cathode Element 2 | 14, 27 | Cathode Element 12 |
| 5, 36 | Cathode Element 3 | 15, 26 | Cathode Element 13 |
| 6, 35 | Cathode Element 4 | 16, 25 | Cathode Element 14 |
| 7, 35 | Cathode Element 5 | 17, 24 | Cathode Element 15 |
| 8, 33 | Cathode Element 6 | 18, 23 | Cathode Element 16 |
| 9, 32 | Cathode Element 7 | | |

Specifications are subject to change without prior notice.