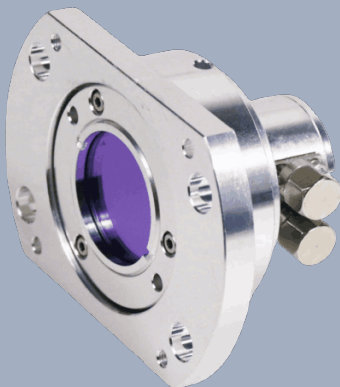


UV Photodetector

SiC-VUV-AG Photodetector

Professional-grade Detection Benchmark for the VUV Band

- Material and Stability
- Anti-interference and Signal Purity
- Flexible Gain Adaptation
- Environmental Compatibility
- Performance and Services



One Platform Many Possibilities

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Overview

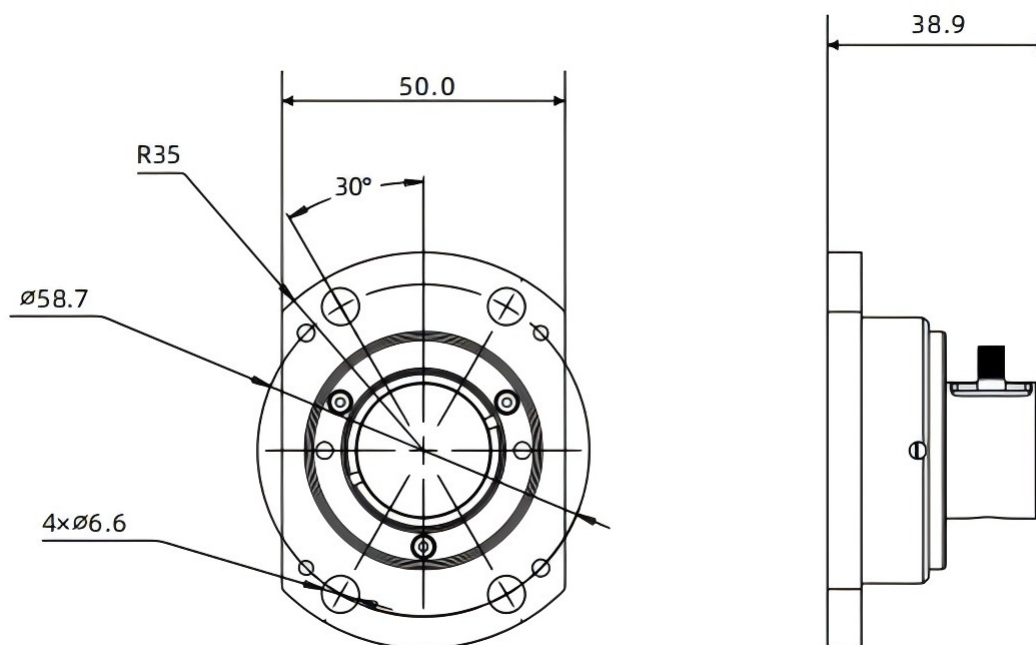
Introduction:

This product is a SiC-based vacuum ultraviolet (VUV) amplification-type photodetector with a photosensitive range of 180nm~200nm, commonly used for VUV light measurement. It features high stability, long service life, resistance to high-flux VUV radiation, visible-blind property and low dark current. Equipped with 8-level adjustable gain for quantitative photoelectric conversion, it supports a high-vacuum environment (10^{-4} Pa) with a vacuum flange structure, and provides technical support and non-standard customization services.

Features:

- SiC-based photodetector with a photosensitive range of 180nm~200nm, commonly used for vacuum ultraviolet (VUV) light measurement ;
- High stability, long service life, and resistance to high-flux VUV radiation ;
- Visible-blind property and low dark current ;
- High responsivity at the 193nm VUV wavelength ;
- Vacuum flange structure, compatible with high vacuum degree (10^{-4} Pa) ;
- Amplification-type detector with 8-level adjustable gain, enabling quantitative photoelectric conversion and suitable for measuring scenarios with different light intensities ;
- Excellent performance, high cost-effectiveness, and comprehensive technical support ;
- Provision of non-standard customization services .

Dimension:



Specifications

SiC-VUV-AG Series Specifications Sheet

Product Model	SiC-VUV-AG
Spectral Response Range	180nm ~ 200nm
Responsivity (@13.5nm)	58mA/W
Gain Range	High-Z Load: 1.51 kV/A to 4.75 MV/A; 50 Load: 0.75 kV/A to 2.38 MV/A
Signal Amplitude	High-Z Load: 0 V– 10V; 50 Load: 0– 5 V
Gain Adjustment Method	Rotary step adjustment: 0– 70 dB, 10 dB per step, 8 steps total. Bandwidth is inversely proportional to gain.
Operating Temperature	-20°C to 80°C
Storage Temperature	-55°C to 90°C
Signal Interface	SMA Connector

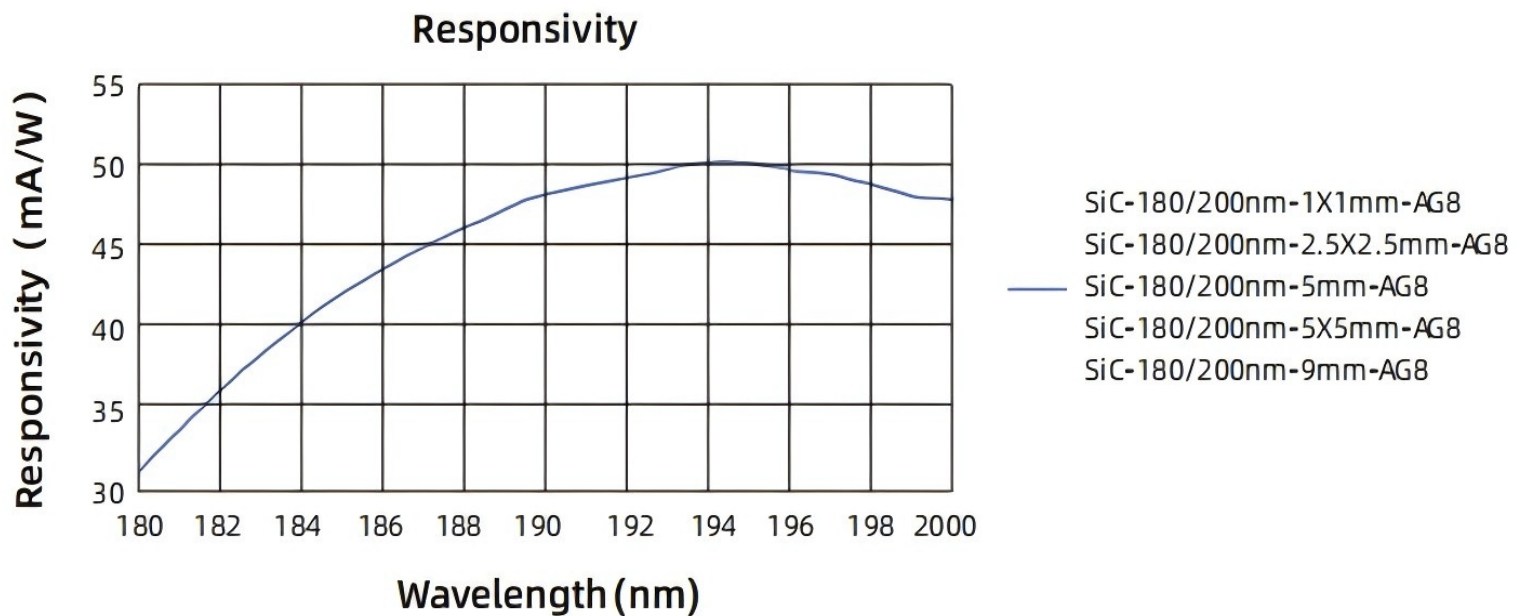
Adjustable Gain Parameters

Detailed Adjustable Gain Specifications Sheet

	0dB	10dB	20dB	30dB
Gain (Hi-Z)	1.51×10^3 V/A	4.75×10^3 V/A	1.5×10^4 V/A	4.75×10^4 V/A
Gain (50)	0.75×10^3 V/A	2.38×10^3 V/A	0.75×10^4 V/A	2.38×10^4 V/A
Bandwidth (BW)	12MHz	1.6MHz	1MHz	260kHz
Noise (RMS)	258 μ V	192 μ V	207 μ V	211 μ V
	40dB	50dB	60dB	70dB
Gain (Hi-Z)	1.51×10^5 V/A	4.75×10^5 V/A	1.5×10^5 V/A	4.75×10^6 V/A
Gain (50)	0.75×10^5 V/A	2.38×10^5 V/A	0.75×10^6 V/A	2.38×10^6 V/A
Bandwidth (BW)	90kHz	28kHz	9kHz	3kHz
Noise (RMS)	214 μ V	234 μ V	277 μ V	388 μ V
Signal Offset			± 8 mV(Typ.) , ± 12 mV(Max)	

Responsivity

Responsivity Diagram of the SiC-VUV-AG Series



Service & Support

We are dedicated to delivering exceptional optoelectronic solutions to every client. From precision manufacturing and secure delivery to full-lifecycle technical support, we are here to ensure a seamless and reliable experience at every step.

1. Warranty Policy

Quality First, Worry-Free Operation

Warranty Period: We offer a **two-year** warranty service for all of our core optoelectronic products, effective from the date of shipment.

Coverage: We provide free repair or replacement services for malfunctions caused by material defects or workmanship errors under normal operating conditions.

Rapid Response: Upon receiving a warranty claim, we guarantee to initiate the assessment process within **24 hours** to minimize your equipment downtime.

2. Technical Support

Expert Team, Full-Process Guidance

Technical Consultation: Our team of senior optical engineers provides **24/7 online support** to assist with installation, commissioning, optical path alignment, and parameter optimization.

Scheduled Maintenance: We offer full-lifecycle maintenance recommendations, including firmware upgrades, optical component cleaning guidelines, and precision calibration services.

Training Services: We provide customized remote or on-site operational and safety training to ensure your team can operate the equipment efficiently and safely.

3. Logistics & Delivery

Precision Packaging, Global Reach

Professional Packaging: Given the fragile nature of optical instruments, we utilize industrial-grade shockproof, anti-static, and moisture-proof vacuum packaging to ensure zero damage during transit.

Logistics Partners: We partner with top-tier global logistics providers (**DHL / FedEx / UPS / SF Express**) to offer reliable shipping with real-time tracking.

Shipping Insurance: All shipments are fully insured to eliminate logistics risks.

4. Compliance & Certification


Strict Standards, Total Compliance

Quality Certification: Our manufacturing process is **ISO 9001 certified**, and our products comply with international standards such as **CE** and **RoHS**.

Export Compliance: "Committed to environmental responsibility, all our products comply with **RoHS 2.0** and **REACH** standards, ensuring safety and global compliance."

Explore Series

Model	Photosensitive Size	Response Time Constant	Outline Dimensions	Net Weight of the Detector
SiC-180/200nm-1 X 1mm-AG8	φ1mm	< 1uS	50mm X 38.9mm X 70mm	0.10kg
SiC-180/200nm-2.5X2.5mm-AG8	φ6.25mm	< 1uS	50mm X 38.9mm X 70mm	0.10kg
SiC-180/200nm-5mm-AG8	φ19.6mm	< 1uS	50mm X 38.9mm X 70mm	0.10kg
SiC-180/200nm-5x5mm-AG8	φ25mm	< 2uS	50mm X 38.9mm X 70mm	0.10kg
SiC-180/200nm-9mm-AG8	φ63.5mm	< 2uS	50mmx 38.9mmx70mm	0.10kg

 Get in touch with our team to explore configurations, request a quote, or learn more about customized solutions tailored to your needs.

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