200-1100nm Silicon-based Bias Photodetector, Active area Φ1.0mm

- ## Product Description

IdealPhotonics' silicon-based bias photodetector has a detection range covering 200nm to 1100nm, with extremely low noise, fast response, no gain, and low cost. It is suitable for conventional optoelectronic detection applications, offering excellent performance and high cost-effectiveness. Technical support is provided in all directions, and it is commonly used in ultraviolet and visible light measurements.

Product features

Detection range 200nm-1100nm, commonly used in ultraviolet and visible light measurements、 Bias-type detector with extremely low noise, fast response, and no gain、 Low-cost, suitable for conventional optoelectronic detection applications、 Excellent performance and high cost-effectiveness. Full technical support、 Custom non-standard services available

Part Number

MP-PD-M-S-350-BC2B10

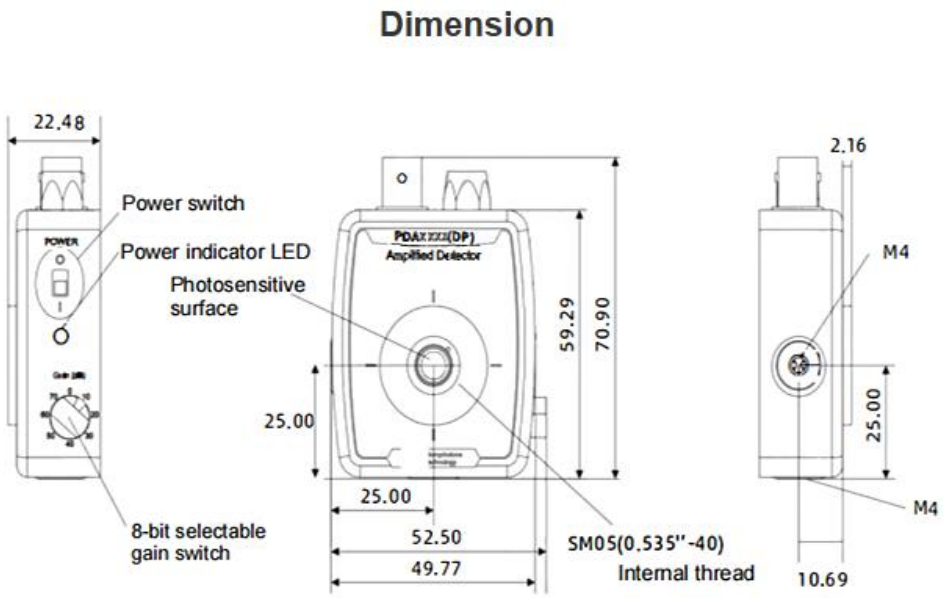
Application area

Ultraviolet and visible light measurements

Core parameters

Wavelength	Active Area	Bandwidth
200-1100nm	Φ1.0mm	350MHz

Dimension Drawing



General Parameters

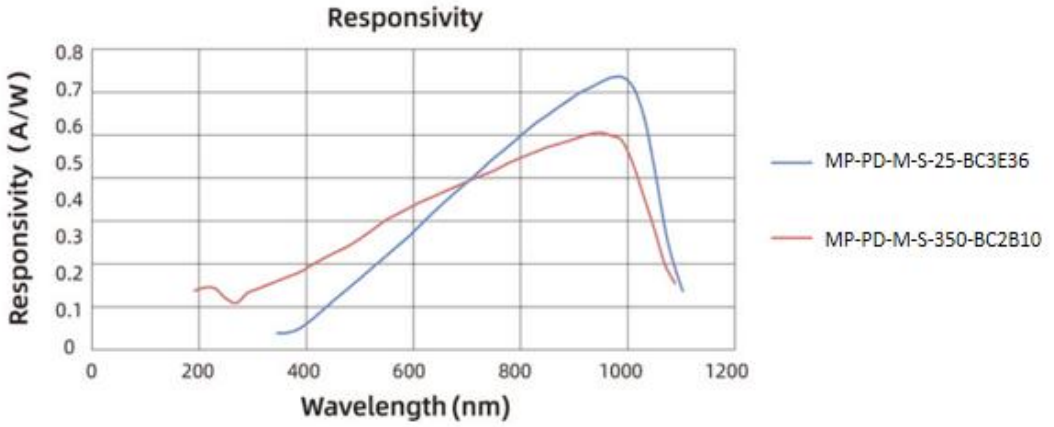
Main Parameters

Parameter	Value		
Wavelength Range	200-1100nm	350-1100nm	320-1100nm
Active area	Φ1.0mm	Φ3.6mm	Φ10.0mm
Bandwidth Range	350MHz	25MHz	10MHz

Rise Time (@50Ω)	1ns	14ns	35ns
NEP	5.0 × 10-14W/H z1/2	1.6×10^{-14}W/Hz$^{1/2}$	2.4×10^{-14}W/Hz$^{1/2}$
Dark Current	0.3nA(Typ.)/10 nA(Max)	0.35nA(Typ.)/6.0nA(Max)	0.9nA(Typ.)/10nA(Max)
Junction Capacitance	6pF(Typ.)	40pF(Typ.)	150pF(Typ.)
Bias Voltage	10V		
Output Current	0~10mA		
Output Voltage	~9V(Hi-Z); ~170 mV(50Ω)		
Photosensitive Surface Depth	0.09" (2.2 m m)	0.09" (2.2 mm)	0.13" (3.3mm)
Operating Temperature	10-40°C		

Storage Temperature	-20-70℃				
Detector Net Weight	0.10kg				
Undervoltage Indicator	Vout ⩽9V(Hi-Z) Vout ⩽170mV(50Ω)				
Dimensions	2.79" X 1.96" X 0.89" (70.9 mm X 49.8 mm X 22.5 mm)				
Power Supply Battery	Power Switch	Signal Interface	Battery Monitoring	Mounting Interface	Optical Interface
A23 , 12VDC , 40mAh	Slide switch	BNC Female	Instant button	M4 X 2	SM1 X 1 SM0.5 X 1

SI Response Curve:



Attachment 1: Optional Configuration Table

Silicon-based Bias Photodetector	Optional Configurations				
Product Name	Material	Type	Features	Wavelength Range Photodetector Size	Optional Configurations
Photodetector	Si Silicon	Amplified	Adjustable Gain	200-1100nm，Φ 1.0mm	

				350-1100nm，Φ 3.6mm	
				320-1100nm，Φ 10.0mm	

Attachment 2: Model Cross-reference Table

Model	Specs
MP-PD-M-S-BC2B10	200-1100nm Silicon-based Bias Photodetector, Active area Φ1.0mm, Rise Time 1ns, Bandwidth 350 MHz
MP-PD-M-S-BC3E36	350-1100nm Silicon-based Bias Photodetector, Active area Φ3.6mm, Rise Time 14ns, Bandwidth 25 MHz
MP-PD-M-S-10-BC3D100	320-1100nm Silicon-based Bias Photodetector, Active area Φ10.0mm, Rise Time 35ns, Bandwidth 10 MHz