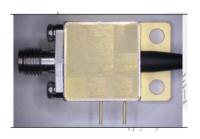
DATASHEET | OCTOBER 2024



The product demodulates modulated optical signals and performs microwave amplification using a high-speed photo-electric detection unit. It offers customizable features such as RF gain and digitally controlled attenuation.

Product Schematic Diagram

The product primarily consists of an optical input unit, a photoelectric detection unit, an RF output unit and a DC power supply unit. It employs a hermetic metal package, with an FC/APC fiber optic connector for optical input. The schematic diagram of the product is shown below:

Optical Input Unit Optical Wicrowave Amplification Unit Optical Wicrowave Amplification Unit Official Optical Input Unit Optical Optical Input Unit

Applications

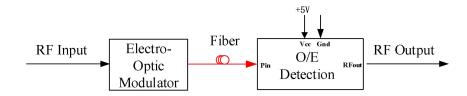
- Radar
- **■** Electronic countermeasures
- Communications
- RF signal transmission
- Other platforms include ground, vehicle-mounted, airborne, and spaceborne systems

Features

- Compact
- Lightweight
- High saturation
- Stable performance across a full temperature range

Typical Application Example

A typical application example is shown in the figure below, where it demodulates the modulated optical signals, amplify and output them.



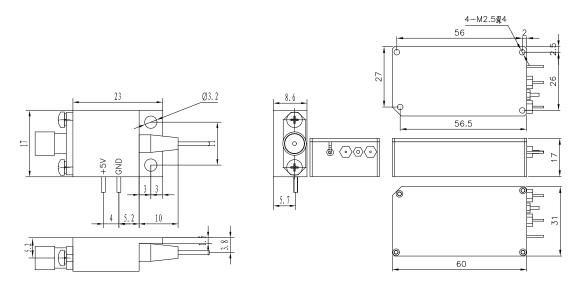
Typical Indicator

Operating Conditions		
Operating Temperature (T _A)	-55℃~+70℃	
Power Supply Voltage (Vcc)	+5V±0.15V	
Power Supply Current (Icc)	≤60mA	
Performance Indicators		
Saturated Optical Power	≥10mW	
Response	≥0.8	
Operating Frequency Range	0.1GHz∼18GHz	
Standing Wave Ratio	≤2	
Temperature Variation Of Gain	≤2.5dB	
At The Same Frequency Point		
Flatness	≤±1.5dB	
Post-Amplifier Gain	≤20dB (Gain quantity customizable)	
Quality Level		
This product meets GZ1-level military standards for application environment.		

Interface Definition

Type	Connector
Output Port	FC/APC(Other types of connectors and fiber types can be
	<u>customized</u>)
Fiber	SMF-28(Standard)
Power Supply	EMI capacitance filter Pin (Soldering temperature not exceed
	300°C for more than 3 seconds)

Outline Drawing



Photoelectric Detection and Amplification Assembly

DATASHEET | OCTOBER 2024

Package Type: Metal cavity package.

External Dimensions: Length×Width×Height (23mm×17mm×8.6mm)

Physical Photo

