

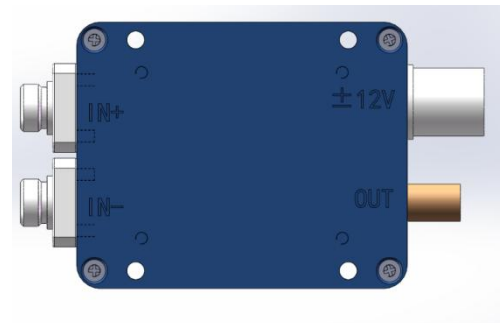
# DAS-BPD Balanced Photodetector Coherent Detection Applications

## 1. Overview

The balanced photodetector contains two photodiodes and a low-noise transimpedance amplifier, in which the two photodiodes are matched to each other for excellent common mode rejection ratio, and the detector removes the common mode noise by subtracting the two detected signals, so that small changes in the effective signal can be obtained from the interfering noise.

## 2. Features

- Covers wavelength range 1000-1700nm
- Compact housing
- Excellent common mode rejection ratio
- SMA output connector



## 3. Applications

- OCT
- DAS
- Outlier Detection
- Optical Delay Measurement

## 4. Specifications

Items	DAS-BPD-200M
Materials	InGaAs
Wavelength	1000-1700nm
Input connector	FC 法兰
Responsivity	0.9A/W @1550nm
Common mode rejection ratio	>20dB
Bandwidth <sup>a</sup>	DC-200MHz
Rise time <sup>a</sup>	2ns
Gain <sup>b</sup>	80kV/A
NEP <sup>c</sup>	2.6pW/√ Hz
Maximum output amplitude <sup>a</sup>	±1.0V
Operating voltage	±12V
Operating Current	<200mA
Output Impedance	50Ω
Output coupling mode	DC
Output connector	SMA female

Operating temperature	-20~65°C
Storage temperature	-40~85°C

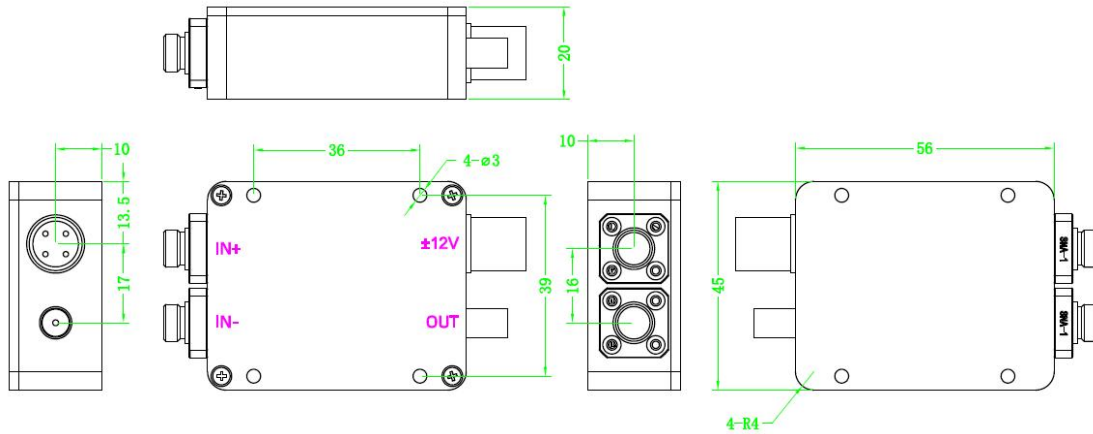
Remarks:

a For 50Ω loads

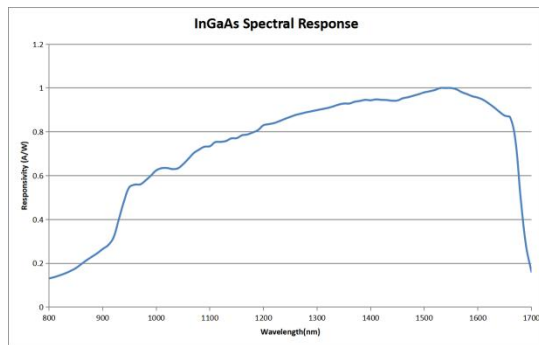
b For high resistance loads

c At 80MHz

## 5. Mechanical dimensions



## 6. Response curve



Note: Response curves are typical values for reference only.