

BPD465C series balanced photodetector

OVERVIEW

The balanced photodetector module contains two photodiodes and a low-noise transimpedance amplifier. Two of the photodiodes are matched to achieve an excellent common-mode rejection ratio. The detector differentiates the two detection signals to eliminate common-mode noise, which can obtain small changes in the effective signal from the interference noise.

FEATURES

- ◆ All-metal shell with excellent shielding performance
- ◆ Excellent common-mode rejection ratio
- ◆ Support customization

APPLICATIONS

- ◆ Spectroscopy
- ◆ Heterodyne detection
- ◆ OCT
- ◆ Optical delay measurement
- ◆ DAS

SPECIFICATIONS

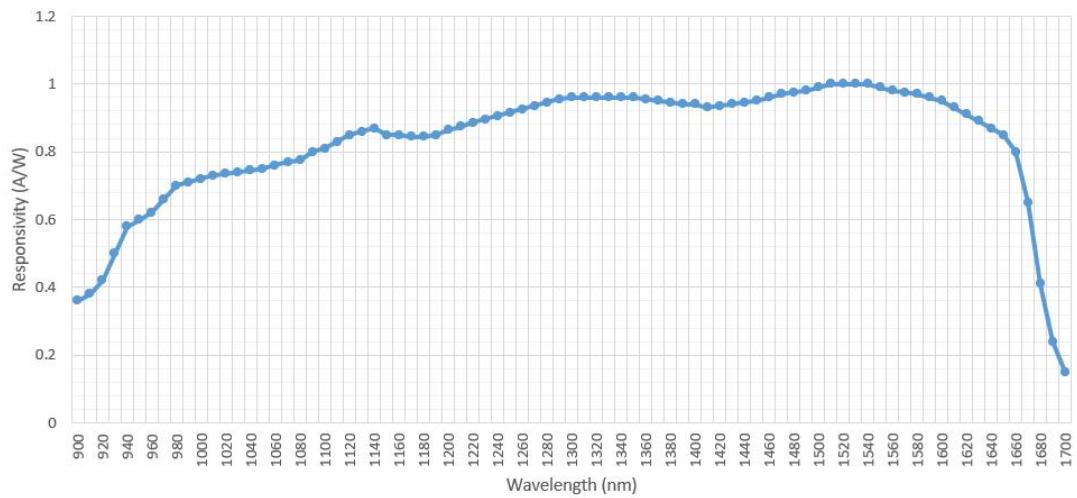
Item	BPD465C-75M	BPD465C-200M	BPD465C-400M
Detector		InGaAs	
Wavelength Range		900–1700nm	
Optical Input		FC/APC	
Peak Response		0.9A/W @ 1550nm	



Common-mode rejection ratio	>25dB		
RF bandwidth	DC~75MHz	DC~200MHz	DC~400MHz
RF rise time @50 Ω	5ns	1. 8ns	1. 0ns
RF gain	88. 5kV/A	18. 3kV/A	4. 5kV/A
Minimum optical power@1550nm	-39. 0dBm (0. 13uw)	-33dBm (0. 5uw)	-29dBm (1. 25uw)
Saturated optical power@1550nm	-14. 2dBm (37. 6uw)	-7. 4dBm (180uw)	-1. 36dBm (730uw)
Noise voltage @50 Ω	<20mVpp	<18mVpp	<10mVpp
RF output swing @50 Ω	±2. 0V	±2. 0V	±2. 0V
RF output impedance	50 Ω		
Monitor 增益 @1550nm			
Monitor 输出阻抗			
Monitor 带宽			
Monitor 噪声电压			
Work voltage	12VDC ±10%		
Work current	<200mA		
Output connector	SMA		
Output coupling mode	DC		
Work temperature	-20~65°C		
Storage temperature	-40~85°C		
Package Size	90mm x 60mm x 22mm (长 x 宽 x 厚, 不含连接器)		

RESPONSE CURVE

光谱响应曲线



MECHANICAL DRAWING

