CBD Series 1060nm Wavelength OCT-Specific Mini-Packaged Balance Photodetector



Description

The Mini Balanced Photodetector integrates two matched ultra-low-noise PIN photodiodes with a low-noise, broadband transimpedance amplifier (TIA) in a compact package. The balanced design effectively suppresses common-mode noise and enhances the system signal-to-noise ratio (SNR). With its compact size, light weight, and low power consumption, the detector is ideally suited for PCB integration. Optimized for 1060 nm Optical Coherence Tomography (OCT) applications, it minimizes the effects of multiple internal reflections, thereby improving OCT image quality.

Features

- Ultra-Compact Size
- High Gain
- High Bandwidth
- Low Noise
- Low Power Consumption

Specifications

PN#	CBD-100M-A10-OCT	CBD-200M-A10-OCT	CBD-300M-A10-OCT	CBD-400M-A10-OCT	CBD-500M-A10-OCT	CBD-1G-A10-OCT	CBD-2G-A10-OCT	Unit
Detector Type	InGaAs							
Wavelength	800~1700							nm
Bandwidth	100M	200M	300M	400M	500M	1G	2G	Hz
Detector Responsivity	0.95	0.95	0.95	0.95	0.95	0.95	0.95	A/W@1550nm
Transimpedance gain	30K	30K	30K	10K	5K	30K	15K	V/A
CMRR	≥30	≥30	≥30	≥30	≥30	≥30	≥30	dB
Saturation optical power	140	140	140	420	840	140	280	μW
NEP	5	5	5	7	7	9	9	pW/Sqrt(Hz)
Output Impedance	50	50	50	50	50	50	50	Ω
Output Coupling Mode	DC /AC	DC / AC	DC /AC	DC / AC	DC / AC	AC	AC	
Supply Voltage	±5	±5	±5	±5	±5	±10	±10	V
Supply Current	0.2(max)	0.2(max)	0.2(max)	0.2(max)	0.2(max)	0.2(max)	0.2(max)	A
Optical Input	SM FC/APC (Hi1060 pigtail)							
Dimensions	24*15.5*5.1							mm

Application

- Distributed Optical Fiber Sensing
- Wind LiDAR
- Optical Coherence Tomography (OCT)
- Spectroscopy
- ns-level optical pulse detection