Balanced Detector

Description

Arcadia Optronix's Balanced Detector incorporates two balanced photodiodes and an ultra-low-noise, high-speed mutual resistance amplifier. Excellent common mode rejection ratio (CMRR) and noise reduction can be achieved.

Key Features

- Common Mode Rejection Ratio: > 25 dB
- Wavelength Range: 900 - 1700 nm
- Bandwidth @ 3 dB: DC-200 M, 400 M

Specifications

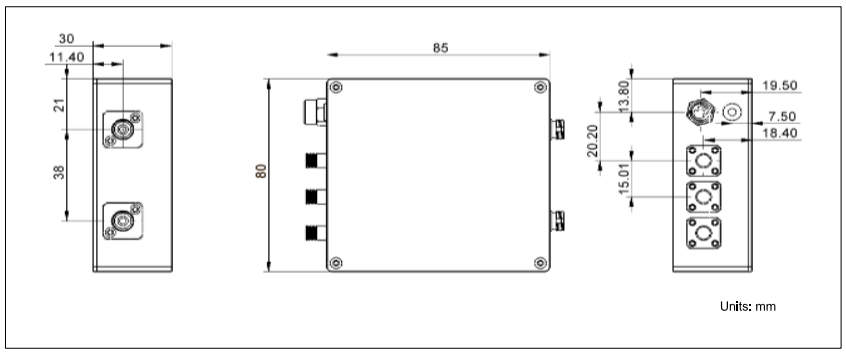
Parameter	Unit	Value
Detector Material	-	InGaAs-PIN
Operating Wavelength Range	nm	900 - 1700
RF OUTPUT Conversion Gain[1]	V/mW	22.5 or 10
RF OUTPUT Voltage [2]	V	3.5 or 1.8
Responsivity	A/W	0.9
Detector Active Area Diameter	mm	0.045
Common Mode Rejection Ratio	dB	≥ 25
Saturation Power[3]	μW	155 or 180
Minimum NEP	pW/ √ Hz	8.52
Storage Temperature	℃	- 40 to + 85
Operating Temperature	℃	- 15 to + 65
Dimensions	mm	85 × 80 × 30

[1]RF OUTPUT Coversion Gain: 200 M version, 22.5 V/mW; 400 M version, 10 V/Mw.

[2]RF OUTPUT Voltage: 200 M version, 3.5 V; 400 M version, 1.8 V.

[3]Saturation Power: 200 M version, 155 μW; 400 M vesion, 180 μW.

Dimensions



Ordering Information

GC-BPD-①①①①-②②②-③

①①①①: Wavelength
9017 - 900 - 1700 nm

②②②: Bandwidth
200 - DC-200 M
400 - DC-400 M

③: Connector Type
A - FC/APC