

Balanced Photoreceiver

Model: OPR-BD1G-L

Features

- FC Fiber Inputs
- InGaAs Detector: 900-1700nm
- >20 dB Common Mode Rejection Ratio
- Provide customized services

Applications

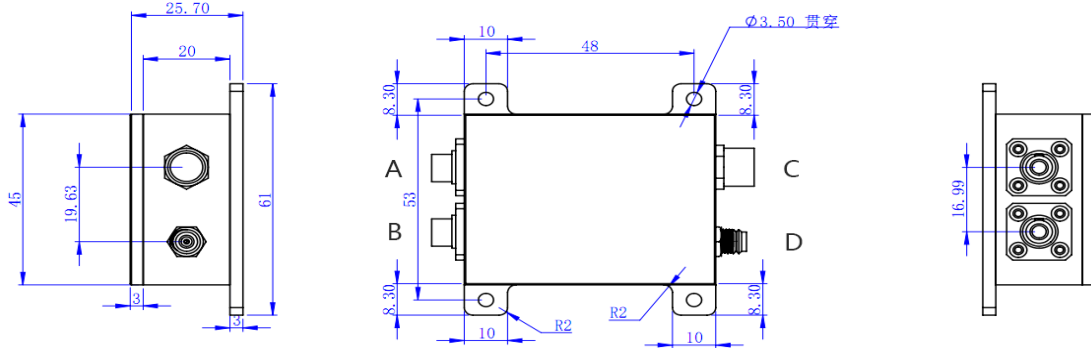
- Spectroscopy
- Laser wind measurement
- Optical Coherence Tomography OCT
- Optical Delay Measurements
- THz Detection



Electrical and optical characteristics($T=23^{\circ}\text{C} \pm 5^{\circ}\text{C}$, Humidity= $35\% \pm 15\%$)

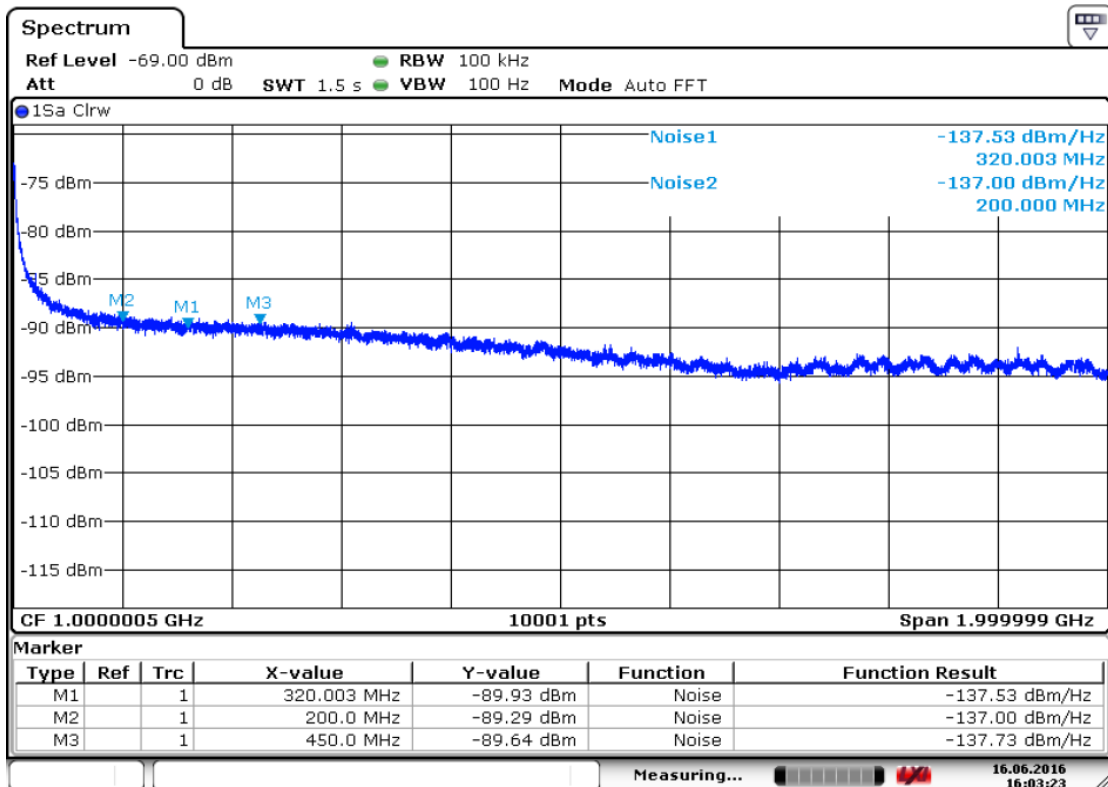
| Parameter | Symbol | Value | | | Unit |
|--------------------------------|---------------|-------------------------------|----------|------|---------------|
| | | Min. | Typ. | Max. | |
| Spectral response range | | 900~1700 | | | nm |
| Detector Diameter | | 75 | | | μm |
| -3dB bandwidth | BW | 1 | | | Ghz |
| Detector responsiveness | R_v | | 1.0 | | A/W |
| Transimpedance gain | G | 16 | | | KV/A |
| Saturation input optical power | P_{in} | | 600 | | μW |
| Incident power | $P_{IN(MAX)}$ | | 5 | 5 | mW |
| Over output voltage noise | N | | 10 | | mVpp |
| Common-mode Rejection Ratio | CMRR | | 25 | | dB |
| Output impedance | R_o | | 50 | | |
| Supply voltage | V_{CC} | | ± 12 | | V |
| Supply current | I_{CC} | | 100 | | mA |
| Optical input | | FC/PC or FC/APC or Free Space | | | |
| Signal output | | SMA | | | |

Package Drawings (Unit: mm)



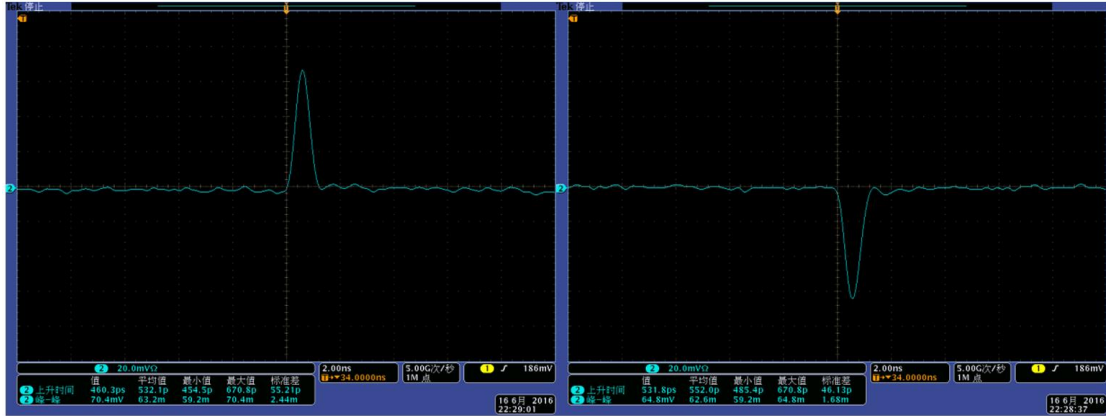
A, B are optical input interfaces (FC), C is power input interfaces (M8), and D is signal output interfaces (SMA).

Noise spectral density distribution



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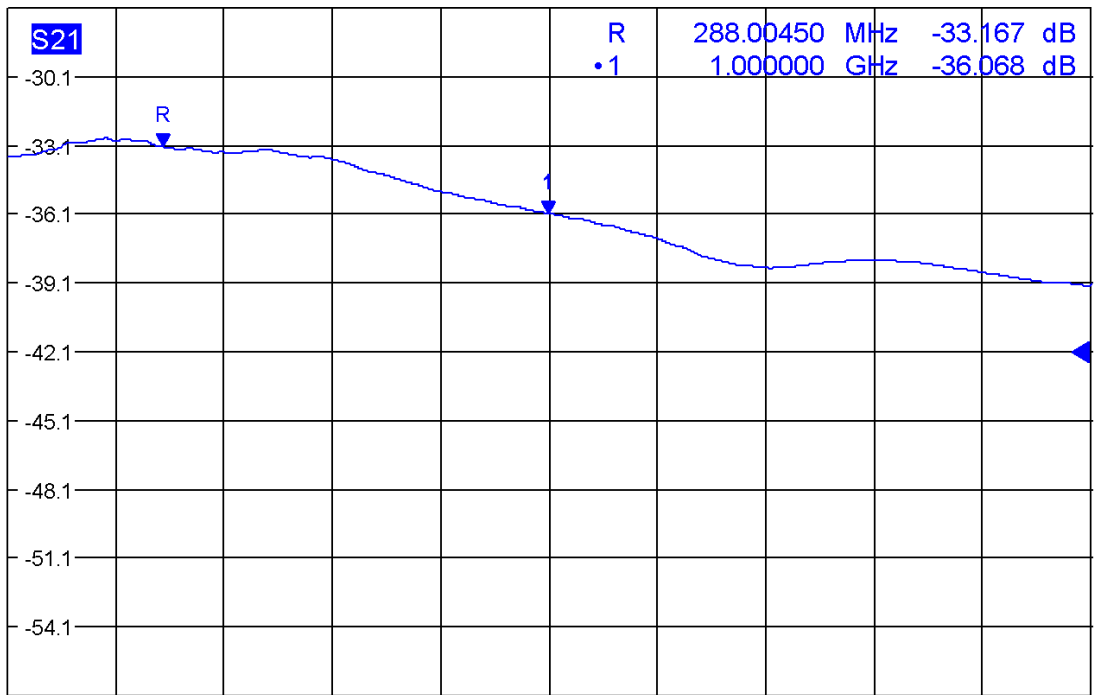
Typical impulse response for positive and negative input



Amplitude-frequency response



Trc1 **S21** dB Mag 3 dB / Ref -42.1 dB Smo 1



Ch1 Center 1.0000045 GHz Pwr -10 dBm Span 1.999991 GHz

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