

High-Speed Balanced Photoreceiver integrated Si-PIN-Photodiodes

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| Features | <ul style="list-style-type: none"> • Si-PIN-Detectors, 1.2 mm active Diameter • Bandwidth DC ... 4 MHz • Amplifier Transimpedance (Gain) 1×10^6 V/A • Conversion-Gain 5.7×10^5 V/W (@800 nm) • FC optical Fiber Input | | |
| Specifications | <i>Test Conditions</i> $V_s = \pm 15$ V, $T_a = 25^\circ$ C | | |
| Gain | Transimpedance | 1×10^6 V/A | (@ 50 Ω Load; doubles with high impedance Load) |
| | Conversion Gain | 5.7×10^5 V/W | (@ 800 nm, 50 Ω Load; doubles with high impedance Load) |
| | Common Mode Rejection | 25 dB typ. | |
| Frequency Response | Lower Cut-Off Frequency | DC | |
| | Upper Cut-Off Frequency | 4 MHz | (- 3 dB) |
| | Rise- / Fall-Time | 90 ns | (10% - 90%) |
| Detectors | Detector Material | Si-PIN | |
| | Active Diameter | 1.2 mm | |
| | Spectral Response | 320 – 1060 nm | |
| | Peak Sensitivity | 0.64 A/W | (@ 900 nm) |
| | Bias Voltage | 12 V | |
| Input | Offset Compensation | > ± 1 V (@ Output) adjustable by Offset trimpot | |
| | Max. Optical Input Power | 3 μ W (for linear Amplification, @ 800 nm) | |
| Noise | NEP | 0.6 pW/ \sqrt Hz | (@ 800 nm, 200 kHz) |
| Output | Output Voltage | ± 1.6 V | (50 Ω Load) |
| | Output Impedance | 50 Ω | |
| Power Supply | Supply Voltage | ± 15 V | |
| | Supply Current | ± 55 mA typ. | |
| Case | Weight | 210 gr. (0.5 lbs) | |
| | Material | AlMg4.5Mn, nickel-plated | |
| Temperature Range | Storage Temperature | -40 ... +100 $^\circ$ C | |
| | Operating Temperature | 0 ... +60 $^\circ$ C | |
| Absolute Maximum Ratings | Optical Input Power | 20 mW | |
| | Power Supply Voltage | ± 22 V | |

