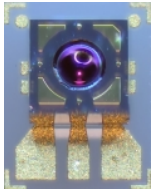


## PD50X1 on Carrier 112 Gbaud Photodiode with Integrated Lens



PS50X1 is an assembly of a single 112 Gbaud photodiode chip flip-chip soldered onto a metallized ceramic carrier with coplanar contact layout.

The bottom illuminated InGaAs p-i-n photodiode structure with an integrated backside lens is optimized for 112 Gbd PAM-4 (400GbE and 800GbE) single-mode telecom, microwave photonic links, RF over fiber as well as test and measurement applications. It offers an excellent responsivity and high speed of response in the wavelength region from 1260 to 1620 nm.

The integrated backside lens focuses the incoming light beam on the topside detecting area, enabling an easy and efficient optical coupling.

### Features

- Large bandwidth: >50 GHz
- High responsivity: 0.8 A/W
- Easy optical coupling through integrated backside lens
- Large lens diameter: 100  $\mu\text{m}$
- Flip-chip soldered onto ceramic carrier with GSG contact layout