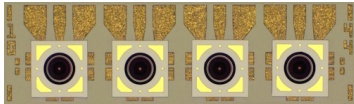


## Multi-channel PD50X1 on Carrier 800G Photodiode Array with Integrated Lens



The PS50X4 photodiode array is an assembly of four PD50X1 photodiode chips flip-chip soldered onto a metallized ceramic carrier with coplanar G-S-G contact layout and a channel pitch of 500  $\mu\text{m}$ . All photodiodes are positioned with high accuracy to guarantee a chip-to-chip alignment as low as  $\pm 6 \mu\text{m}$ .

PD50X1 is an ultra high-speed photodiode chip with integrated backside lens. The bottom illuminated p-i-n photodiode structure is optimized for up to 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 allows easy and efficient optical coupling by increasing the effective active diameter.

### Features

- High precision multi-channel placement
- Channel pitch: 500  $\mu\text{m}$
- High responsivity: 0.8 A/W
- Easy optical coupling through 100  $\mu\text{m}$  integrated backside lens
- Large effective active diameter
- Flip-chip soldered onto ceramic carrier
- Customized carrier layouts