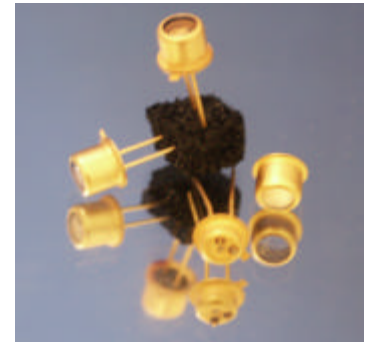


PHOTO DIODES 2.4; 3.6 μm

Model PD24-05 2.4 mm 0,5 mm

- Photodiodes **PD24-05** are designed for detecting the radiation in the Middle Infrared spectral range from 800 to 2400 nm. Heterostructures with the InGaAsSb active layer and the AlGaAsSb "window" are grown on GaSb substrates.
- Photodiodes **PD24-05** are mounted in standard 5.4 mm package TO-18. They have the photosensitive area with diameter of 0,5 mm. Fast response makes possible their use for the detection of high frequency modulated laser or LED emission.
- Related products: **PD24-05** can be used in optical pair with our **LED16÷LED23** and **LD200÷LD230**. We offer the preamplifier model **AM-04** suitable for **PD24-05**.



| Parameters | Min | Typ | Max |
|---|-------------------------|-------------|-------------|
| Cut-off wavelength, μm (at 10%) | 2.38 | 2.40 | 2.43 |
| Responsivity, A/W ($\lambda=1.95\div 2.1\mu\text{m}$) | 0.9 | 1.0 | 1.1 |
| Dark Current, μA | ($V = -0.2\text{ V}$) | 5 | 12 |
| | ($V = -0.5\text{ V}$) | 10 | 20 |
| | ($V = -1.0\text{ V}$) | 15 | 35 |
| Impedance, kOhm ($V = -10\text{ mV}$) | 1,5 | 3,0 | 10,0 |
| Capacitance, pF ($V=0, f=1\text{ MHz}$) | 140 | 170 | 400 |
| Rise and Fall Time, ns ($V=0, 50\text{ Ohm}$) | 10 | 15 | 50 |
| Detectivity, $\text{cm.Hz}^{1/2} / \text{W}$ ($\lambda_p, 1000, 1$) | 3.10^{10} | 5.10^{10} | 8.10^{10} |
| Operating Temperature Range, $^{\circ}\text{C}$ | -40÷+50 | | |
| Sensitive area diameter, mm | 2 | | |
| Soldering temperature | 260 $^{\circ}\text{C}$ | | |
| Package | TO-18 | | |

