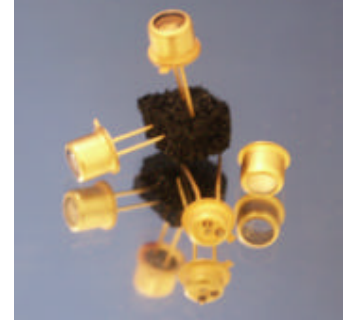


# PHOTO DIODES 2.4; 2,5; 3.6 $\mu\text{m}$

## Model PD25-05

2.5 mm 0,5 mm

- Photodiodes **PD25-05** are designed for detecting the radiation in the Middle Infrared spectral range from 1100 to 2500 nm. Heterostructures with the InGaAsSb active layer and the AlGaAsSb "window" are grown on GaSb substrates.
- Photodiodes **PD25-05** 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: **PD25-05** can be used in optical pair with our **LED16÷LED23** and **LD200÷LD230**. We offer the preamplifier model **AM-04** suitable for **PD25-05**.



Parameters	Min	Typ	Max
Cut-off wavelength, $\mu\text{m}$ (at 10%)		2.55	
Responsivity, A/W ( $\lambda=1.95\div 2.1\mu\text{m}$ )	0.9	1.0	1.1
Dark Current, $\mu\text{A}$ ( $V=-0.2\text{ V}$ )		28	
( $V=-0.4\text{ V}$ )		40	
( $V=-0.6\text{ V}$ )		56	
Impedance, kOhm ( $V=-10\text{ mV}$ )	1,5	2.2	3,0
Capacitance, pF ( $V=0, f=1\text{ MHz}$ )	160	180	200
Rise and Fall Time, ns ( $V=0, 50\text{ Ohm}$ )	15	20	30
Detectivity, $\text{cm.Hz}^{1/2}/\text{W}$ ( $\lambda_p, 1000, 1$ )	$1.10^{10}$	$3.10^{10}$	$5.10^{10}$
Operating Temperature Range, $^{\circ}\text{C}$	-40÷+50		
Sensitive area diameter, mm	2		
Soldering temperature	260 $^{\circ}\text{C}$		
Package	TO-18		

