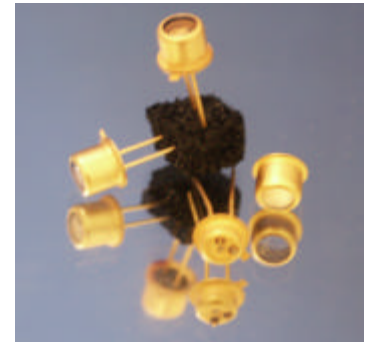


# PHOTO DIODES 2.4; 3.6 $\mu\text{m}$

## Model PD23-02 2.3 mm 0.2 mm

- Photodiodes **PD23-02** are designed for detecting the radiation in the Middle Infrared spectral range from 800 to 2300 nm. Heterostructures with the InGaAsSb sensitive layer and the AlGaAsSb "window" are grown on GaSb substrates.
- Photodiodes **PD23-02** are mounted in standard 5.4 mm package TO-18. They have the photosensitive area with diameter of 200  $\mu\text{m}$ . Fast response makes possible their use for the detection of high frequency modulated laser or LED emission.
- Related products: **PD23-02** can be used in optical pair with our **LED16÷LED23** and **LD200÷LD230**. We offer the preamplifier model **AM-04** suitable for **PD23-02**.



Parameters	Min	Typ	Max
Cut-off wavelength, $\mu\text{m}$ (at 10%)	2.30	2.30	2.35
Responsivity, A/W ( $\lambda=1.95\div 2.1\mu\text{m}$ )	0.9	1.0	1.1
Dark Current, $\mu\text{A}$	( $V = -0.2\text{ V}$ )	1.0	2.0
	( $V = -0.5\text{ V}$ )	2.0	3.0
	( $V = -1.0\text{ V}$ )	3.0	5.0
Impedance, kOhm ( $V = -10\text{ mV}$ )	30	60	100
Capacitance, pF ( $V=0, f=1\text{ MHz}$ )	10	20	30
Rise and Fall Time, ns ( $V=0, 50\text{ Ohm}$ )	1	3	5
Detectivity, $\text{cm}\cdot\text{Hz}^{1/2}/\text{W}$ ( $\lambda_p, 1000, 1$ )	$4.10^{10}$	$5.10^{10}$	$8.10^{10}$
Operating Temperature Range, $^{\circ}\text{C}$	-40÷+50		
Sensitive area diameter, $\mu\text{m}$	200		
Soldering temperature	260 $^{\circ}\text{C}$		
Package	TO-18		

