

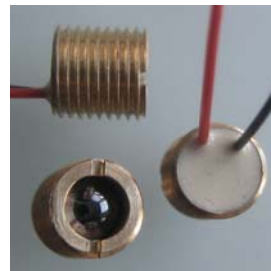
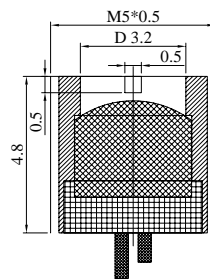
Optically Immersed InAs photodiode

PD33fsiSr

| | | | |
|-------------------------|------------------------------|----------------------------------|---------------------------|
| Peak wavelength | λ | μm | 3.35 ± 0.05 |
| Spectral response range | $\lambda_{0.1}$ | μm | $1.75 \div 3.8$ |
| Current sensitivity | S_I | A/W | ≥ 1 |
| Resistance at zero bias | R_0 | Ohm | ≥ 30 |
| Detectivity | $D^*_{\lambda_{\text{max}}}$ | $\text{cmHz}^{1/2}\text{W}^{-1}$ | $\geq 1.2 \times 10^{10}$ |
| Voltage sensitivity | S_U | V/W | ≥ 30 |
| Switching time | τ | ns | < 20 |

| Model | Sensitive area, mm | Lens material | Angle of view FWHM, deg. | Optical axis deviation, deg. | Operation conditions, °C | Lifetime, hrs | Polarity |
|-----------|--------------------|---------------|--------------------------|------------------------------|--------------------------|---------------|-----------------------------------------------|
| PD33fsiSr | $\varnothing 3.2$ | Si | ~ 15 | ≤ 5 | $-25 \div +60$ | $> 80\,000$ | Red wire – positive, Black wire – negative |

Product view



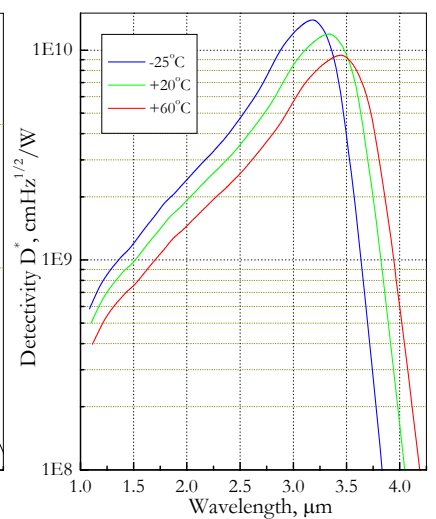
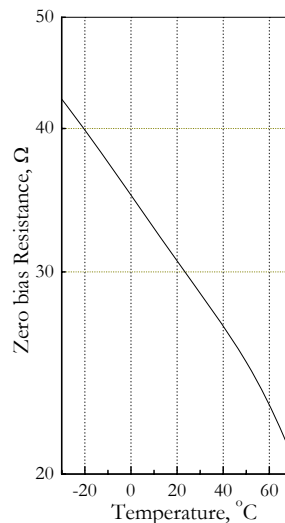
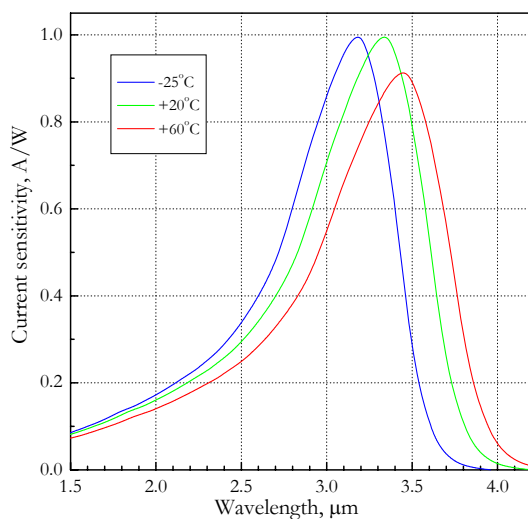
Features

Growth of narrow gap semiconductor alloys onto n^+ -InAs substrate; Flip-chip design of photodiodes; Optical coupling through the use of chalcogenide glasses and Si lenses with antireflection coating

Ambient and high temperature operation; No bias required; Short time constant; High value of shunt resistance; Operation from DC to VHF; Highest long term stability

Data are valid for 22°C. Photodiode could be equipped with preamplifier that is designed for conversion of PD photocurrent into a convenient output voltage and is adjusted for the particular PD taking into account the R_0 value and frequency range. Other packages are available upon request

Spectral response and shunt resistance vs. temperature



Product specifications are subject to change without prior notice due to improvements or other reasons. Updated 14.10.11



**ООО «Иоффе ЛЕД»
Ioffe LED, Ltd**

Politechnicheskaya 26,
St.Petersburg, 194021, RUSSIA

<http://www.ioffeled.com>
e-mail: Mremenny@mail.ioffe.ru
Tel./fax: +7 812 297 7446