InAsSb photodiode — **PD42fsi series**

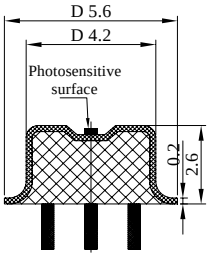
Peak wavelength	λ	μm	4.15±0.05
Spectral response range	$\lambda_{0.1}$	μm	2.0÷4.7
Current sensitivity	S_I	A/W	≥1.0
Resistance at zero bias	R_0	Ohm	≥40
Detectivity	$D^*_{\lambda max}$	$cmHz^{1/2}W^{-1}$	$\geq 1\times10^9$
Voltage sensitivity	S_U	V/W	≥40
Switching time	τ	ns	<50*

* - according estimation

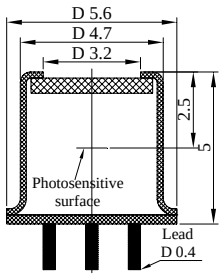
Model	Package	Cap with window	Sensitive area, mm	Angle of view FWHM, deg.	Operation conditions, °C	Polarity
PD42fsiTO18	TO18 (TO46)	-	0.33×0.33	140	-25÷+60	Short leg is negative
PD42fsiTO18c	TO18 (TO46)	Sapphire		50		
PD42fsiTO39c	TO39	Sapphire		90		

Product view

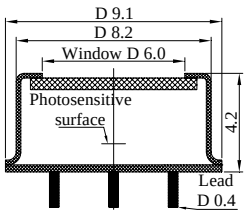
PD42fsiTO18



PD42fsiTO18c



PD42fsiTO39c



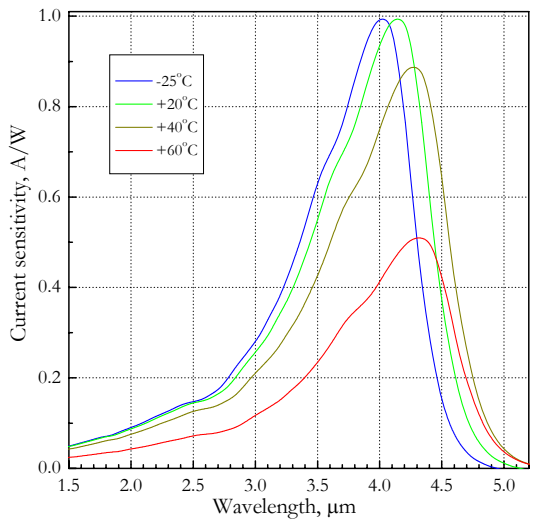
Features

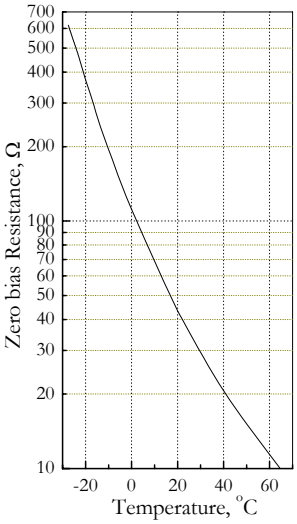
Growth of narrow gap semiconductor alloys onto n^+-InAs substrate; "Wide gap" window

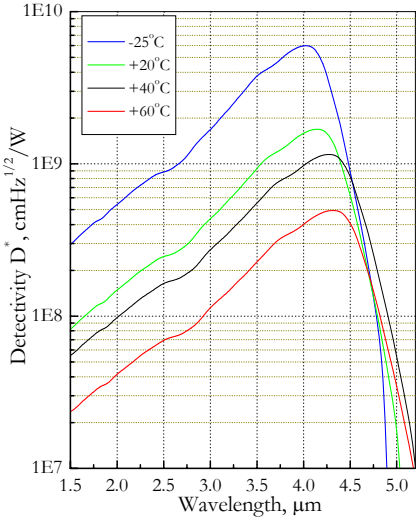
Ambient and high temperature operation; No bias required; Short time constant; High value of shunt resistance; Operation from DC to VHF; Highest long term stability

Data are valid for 22ºC. 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 Ro value and frequency range. Other packages are available upon request

Spectral response and shunt resistance vs. temperature







ООО «Иоффе ЛЕД»
Ioffe LED, Ltd

Politechnicheskaya 26,
St.Petersburg, 194021, RUSSIA

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