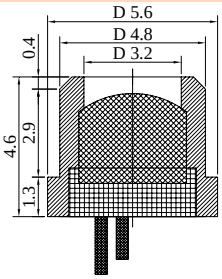
Optically Immersed 1.95 μm Photodiode — **PD19Su, PD19Sr**

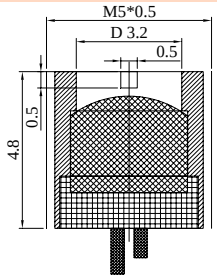
Peak wavelength	λ_{max}	μm	1.9
Current sensitivity	S_I	A/W	≥0.5
Shunt Resistance	R_0	kOhm	≥10
Detectivity	$D^*_{\lambda max}$	$cmHz^{1/2}W^{-1}$	$\geq 1\times10^{11}$
Voltage sensitivity	S_U	V/W	≥5000
Switching time	τ	ns	≤20

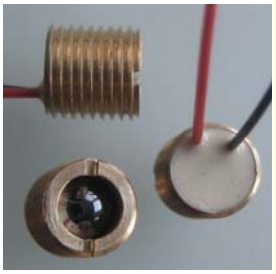
Model	Sensitive area, mm	Lens material	Field of view, deg.	Optical axis deviation, deg.	Operation conditions, °C	Lifetime, hrs	Polarity
PD19Su/Sr	∅ 3.2	Si	~15	≤5	-25÷+60	>80 000	Red wire (red point on house) – positive, Black or/and short wire– negative

Product view



PD19Su





PD19Sr

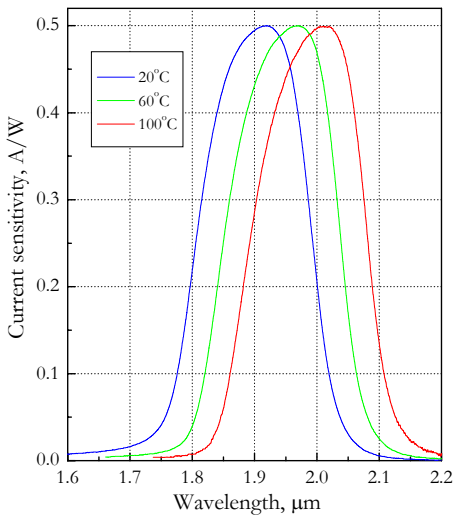
Features

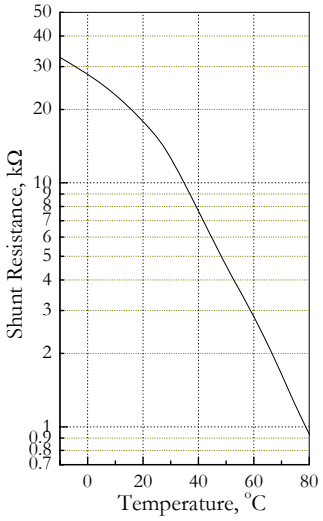
Growth of narrow gap semiconductor alloys onto n^+-GaSb substrate; Back side illuminated Flip-chip design of PDs; Optical coupling through the use of chalcogenide glasses and Si lenses with antireflection coating

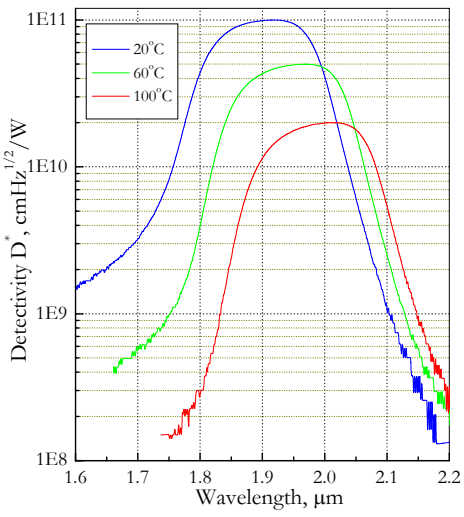
Ambient and high temperature operation; No bias required; Short time constant; High value of shunt resistance; Operation from DC to VHF; Highest long term stability

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. Angle of view is small and thus we recommend adjusting PD position regarding to the emission system before final evaluation/use of the devices.

Spectral response and shunt resistance vs. temperature







Product specifications are subject to change without prior notice due to improvements or other reasons. Updated 3.11.11

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