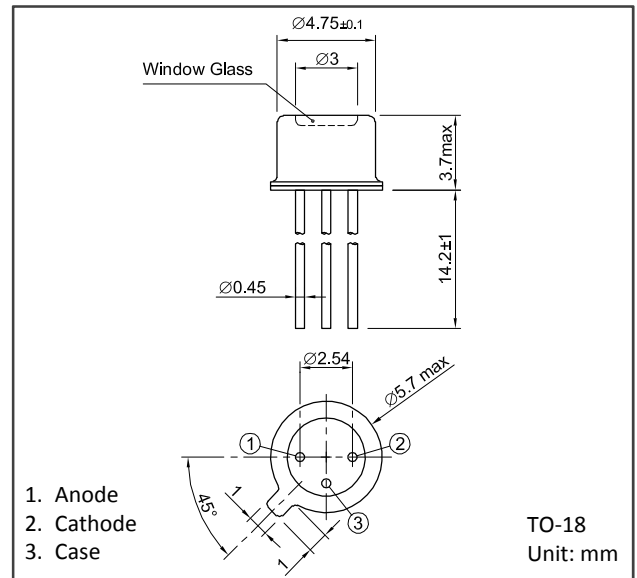


Features

- Large active area convenient for optical coupling
- Low dark current
- Respond to 1310, C-band and L-Band
- Hermetic seal
- High reliability

Applications

- Near infrared sensors
- Laser diode and LED power monitors
- Near Infrared spectroscopy
- Optical measurement and sensing



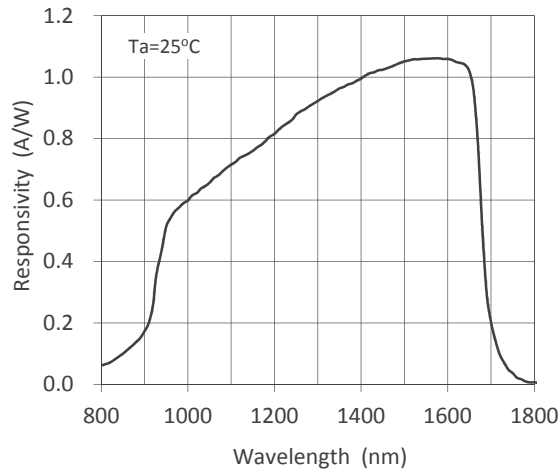
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Note
Reverse voltage	V_R	20	V	
Maximum optical power input	$P_{i,max}$	30	mW	
Forward current	I_F	50	mA	
Operating temperature	T_{opr}	-40 to +85	°C	Avoid dew condensation
Storage temperature	T_{stg}	-40 to +85	°C	Avoid dew condensation

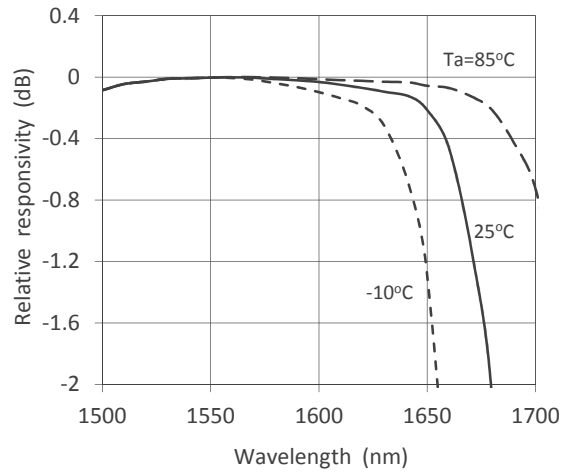
Electrical and Optical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Active diameter	D	300			μm	
Bandwidth	BW	400	600	-	MHz	$P_i = -10\text{dBm}$, $V_R = 5\text{V}$, Small signal modulation
Responsivity	R	0.8	0.9	-	A/W	$\lambda = 1310\text{nm}$, $V_R = 5\text{V}$
		0.9	1.0	-		$\lambda = 1550\text{nm}$, $V_R = 5\text{V}$
Dark current	I_D	-	100	600	pA	$V_R = 5\text{V}$
Chip capacitance	C_{chip}	-	4	6	pF	$V_R = 5\text{V}$, $f = 1\text{MHz}$
Total capacitance	C_t	-	4	6	pF	$V_R = 5\text{V}$, $f = 1\text{MHz}$
Responsivity uniformity	ΔR	-	-	0.5	dB	$\lambda = 1530\text{-}1610\text{nm}$, $T_{op} = -10$ to $+85^\circ\text{C}$

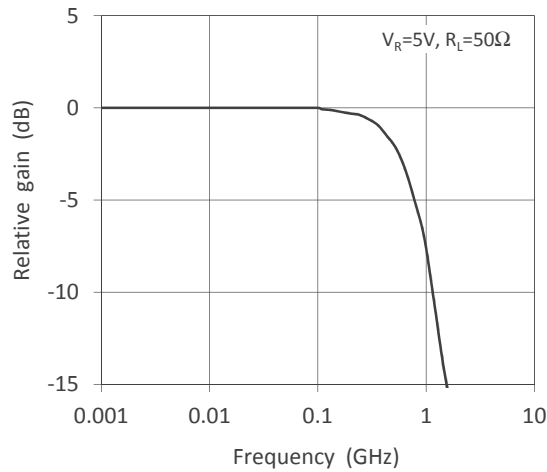
Spectral Responsivity



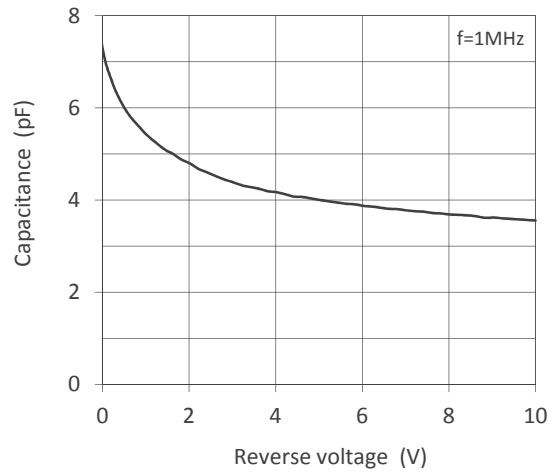
Uniformity of Spectral Responsivity



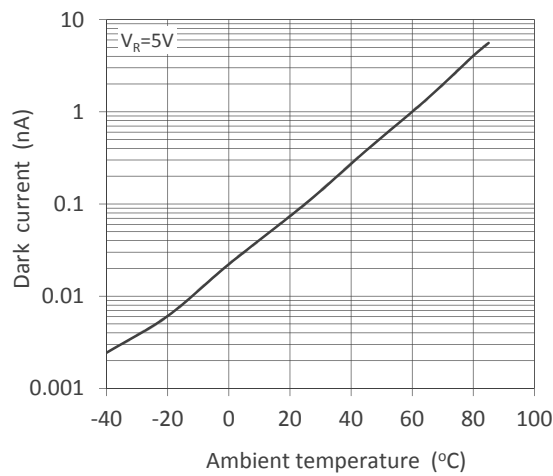
Frequency Response



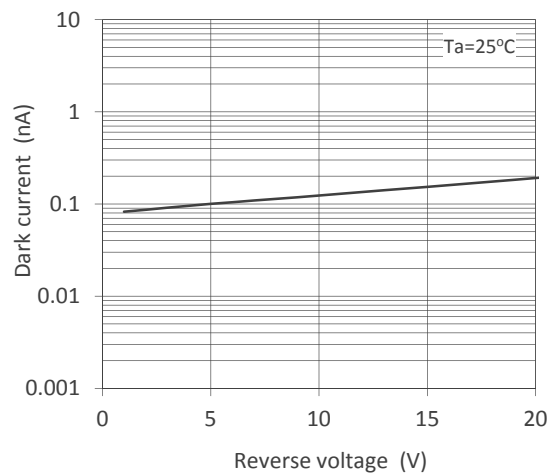
Capacitance - Reverse Voltage



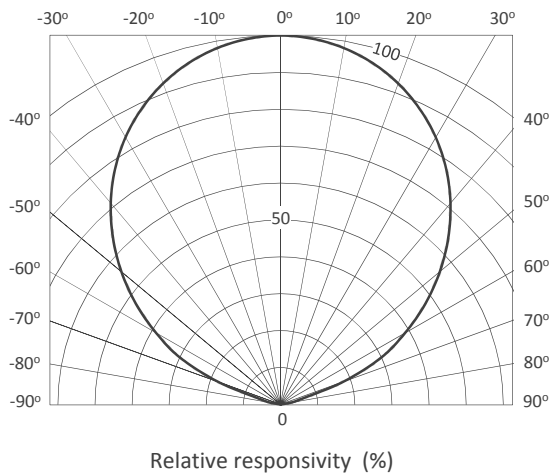
Dark Current - Ambient Temperature



Dark Current - Reverse Voltage



Directivity



- Specifications, characteristics, data, materials, structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.
- Products listed in this datasheet comply with the RoHS Directive (EU2002/95/EC).

Opto-technologies for the Future



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