

**Features**

- Low capacitance and high speed with a PIN structure
- Low dark current
- Low voltage operation
- High reliability
- Pigtail type available as an option

**Applications**

- Digital and analog optical communications
- Optical LAN
- OTDR

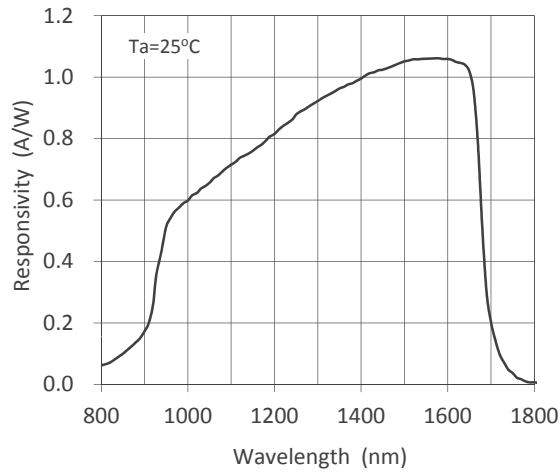
**Absolute Maximum Ratings**

Parameter	Symbol	Value	Unit	Note
Reverse voltage	$V_R$	20	V	
Maximum optical power input	$P_{i,max}$	10	mW	
Forward current	$I_F$	10	mA	
Operating temperature	$T_{opr}$	-40 to +85	°C	Avoid dew condensation
Storage temperature	$T_{stg}$	-40 to +85	°C	Avoid dew condensation

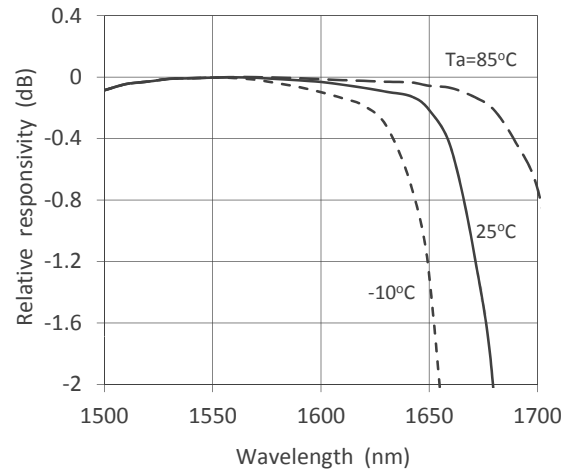
**Electrical and Optical Characteristics (Ta=25°C unless otherwise noted)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Active diameter	D	80			μm	
Bandwidth	BW	1.0	2.0	-	GHz	$P_i=-10\text{dBm}$ , $V_R=5\text{V}$ , 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	$I_D$	-	30	160	pA	$V_R=5\text{V}$
Chip capacitance	$C_{chip}$	-	0.65	0.8	pF	$V_R=5\text{V}$ , $f=1\text{MHz}$
Total capacitance	$C_t$	-	0.95	1.1	pF	$V_R=5\text{V}$ , $f=1\text{MHz}$
Responsivity uniformity	$\Delta R$	-	-	0.5	dB	$\lambda=1530-1610\text{nm}$ , $T_{op}=-10$ to $+85^\circ\text{C}$

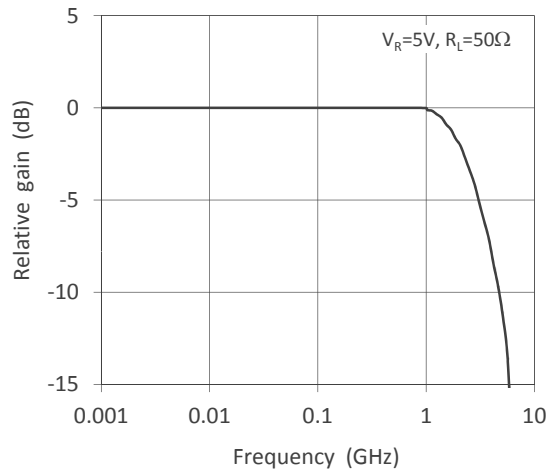
### Spectral Responsivity



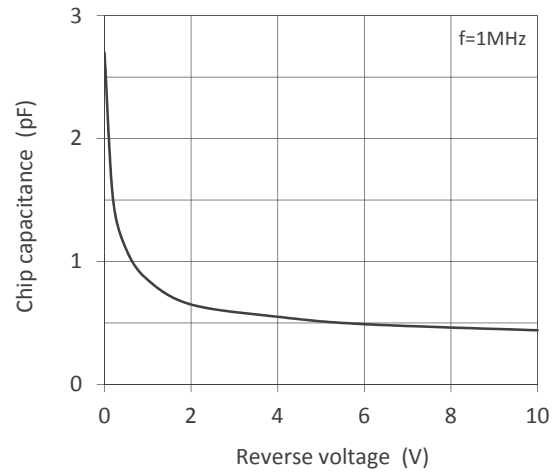
### Uniformity of Spectral Responsivity



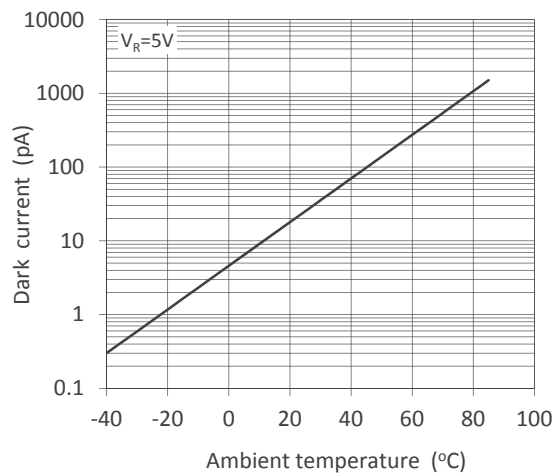
### Frequency Response



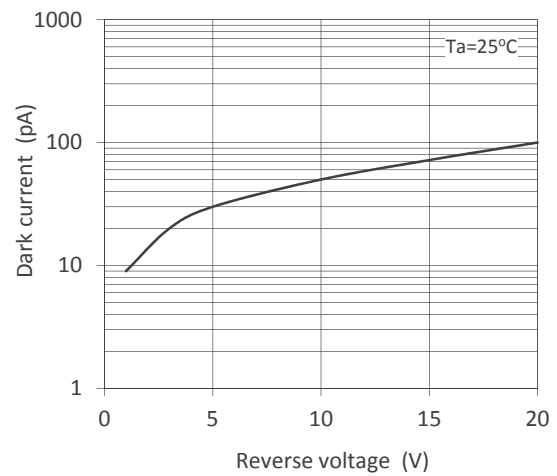
### Capacitance - Reverse Voltage



### Dark Current - Ambient Temperature



### Dark Current - Reverse Voltage



- 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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