



### FEATURES

- Low Noise
- Low Dark Current and Capacitance
- High Sensitivity
- Detection in SWIR
- Hermetic

### APPLICATIONS

- Industrial Sensing
- Security
- Communication
- Medical

### DESCRIPTION

The SD0003-3111-011 is a high sensitivity, low noise, 0.06 mm diameter active area InGaAs photodiode for detection at SWIR, NIR wavelengths for imaging and sensing applications. The photodetector is assembled in a TO-46 package with a flat window cap.

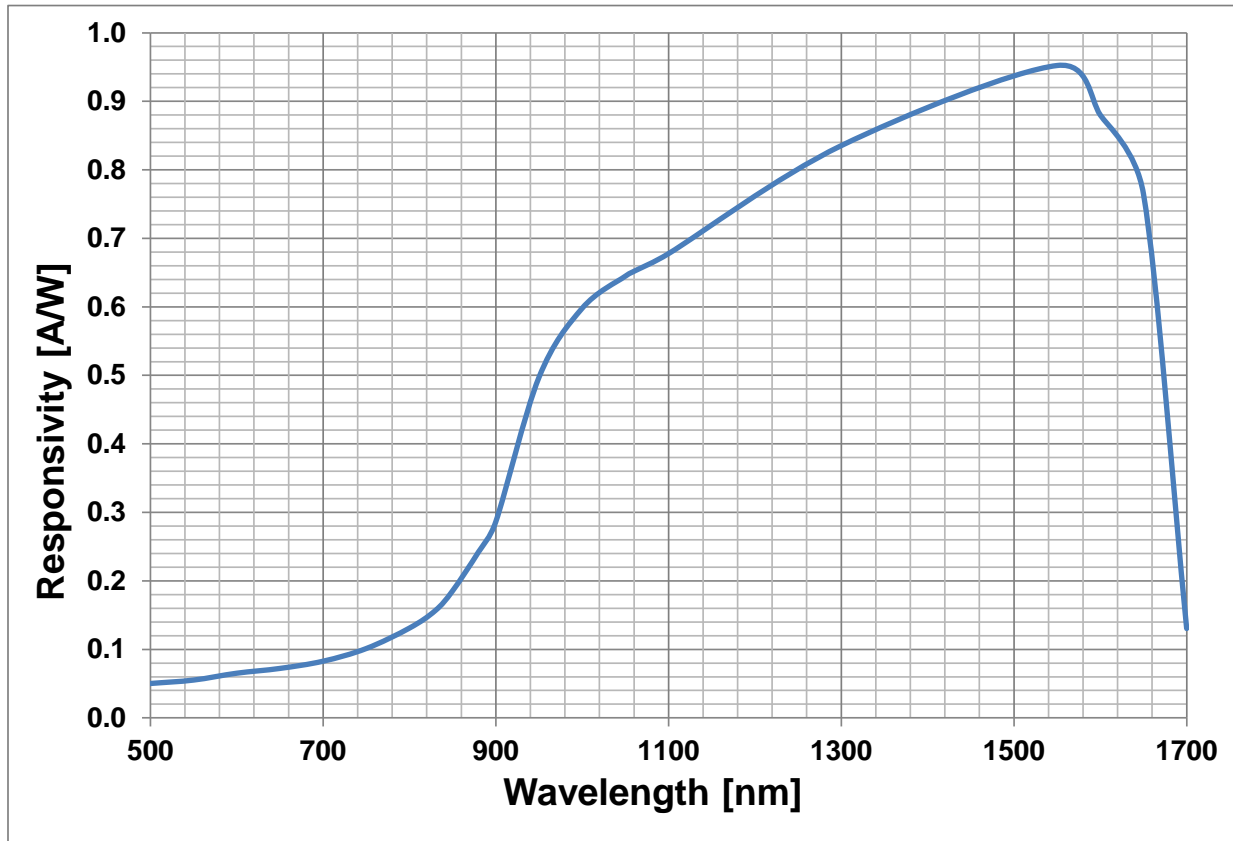
#### > Absolute Maximum Ratings

Model Number	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
SD0003-3111-011	900 to 1700	20	-40 to +100	-55 to +125	TO-46

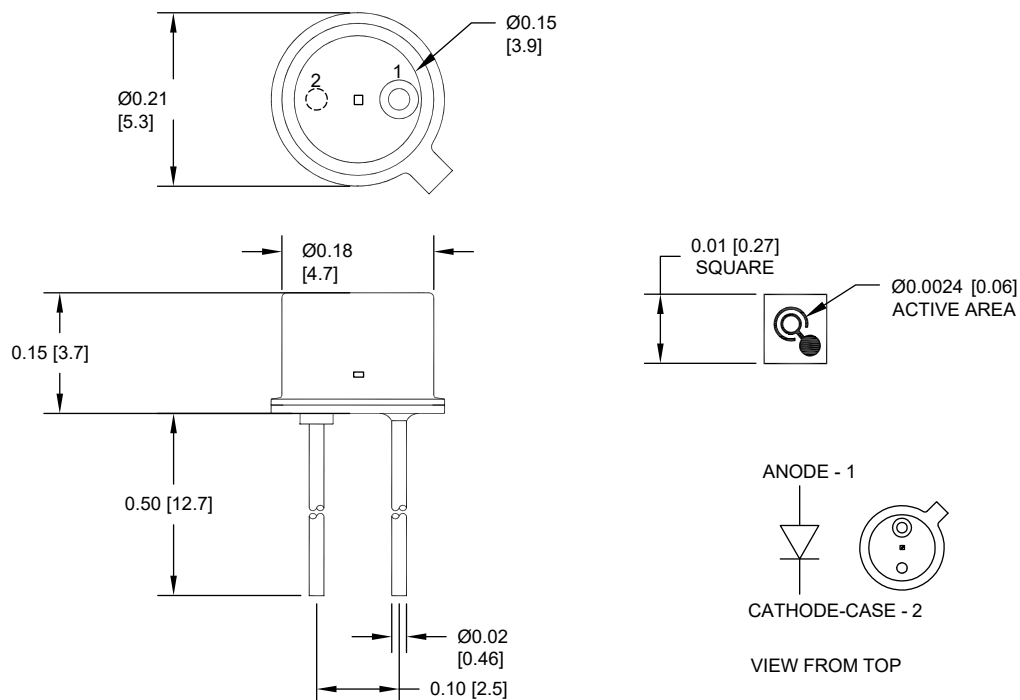
#### > Electrical and Optical Characteristics

Typical Characteristics (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Breakdown Voltage	I <sub>R</sub> =1µA	V <sub>BD</sub>	35	-	-	V
Dark Current	V <sub>R</sub> =1V	I <sub>d</sub>	-	0.05	0.3	nA
Forward Voltage	I <sub>f</sub> =3mA	V <sub>f</sub>	-	0.6	0.8	V
Diode Capacitance	V <sub>R</sub> =5V, F=1MHz	C <sub>D</sub>	-	1.5	2	pF
Shunt Resistance	V=10mA	R <sub>s</sub>	40	-	-	MΩ
Responsivity	V <sub>R</sub> =5V, λ=1300nm	R	0.7	0.8	-	A/W
	V <sub>R</sub> =5V, λ=1550nm		0.7	0.85	-	

## &gt; Typical Spectral Response



## &gt; Package dimensions in inches [mm]



&gt;Soldering Conditions: 260°C 1/16 inch away from case for 3 seconds max.

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## MATERIALS SAFETY

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