

An OSI Optoelectronics Company

SD0050-3111-111

FEATURES

- Low Noise
- Low Dark Current and Capacitance
- **High Sensitivity**
- Detection in LWIR
- Hermetic
- Isolated Anode and Cathode

DESCRIPTION

The SD0050-3111-111 is a high sensitivity, low noise, 0.25 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.

APPLICATIONS

- Industrial Sensing
- Security
- Communication
- Medical .

> Absolute Maximum Ratings

Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
SD0050-3111-111	900 to 1700	20	-40 to +100	-55 to +125	TO-46

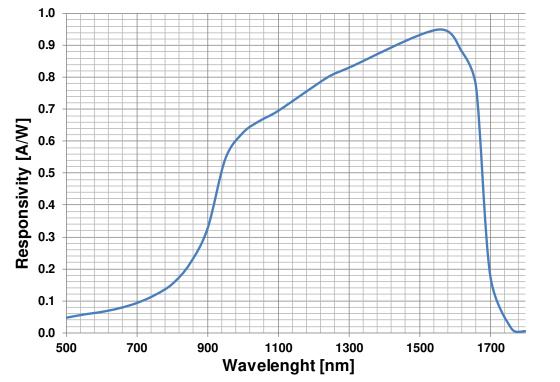
> Electrical and Optical Characteristics

Typical Characteristics (T=23°C unless specified)									
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit			
Breakdown Voltage	I _R =1µA	VBD	35	-	-	V			
Dark Current	V _R =10V	ld	-	0.2	1	nA			
Forward Voltage	I _f =3mA	Vf	-	0.6	0.8	V			
Diode Capacitance	V _R =5V, F=1MHz	CD	-	-	6	pF			
Shunt Resistance	V=10mA	R₅	40	-	-	MΩ			
Deeneneitivity	V _R =5V, λ=1300nm	Б	0.8	0.83	-	A/W			
Responsitivity	V _R =5V, λ=1550nm	R	0.9	0.95	-				

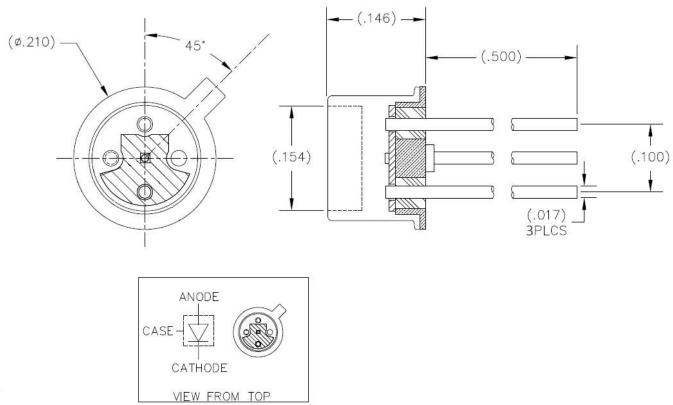
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> Spectral Response



> TO-46 Package





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MATERIALS SAFETY

This product is free of conflict minerals and meets REACH compliance. Please see website for reports.