Advanced Photonix
An OSI Optoelectronics Company

SD0003-3111-111

RoHS COMPLIANT

FEATURES

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

DESCRIPTION

The SD0003-3111-111 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.

APPLICATIONS

- Industrial Sensing
- Security
- Communication
- Medical

> Absolute Maximum Ratings

Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
SD0003-3111-111	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	V_{BD}	35	-	-	V
Dark Current	V_R=10V	I_d	-	0.05	1	nA
Forward Voltage	I_f=3mA	V_f	-	0.6	0.8	V
Diode Capacitance	V_R=5V, F=1MHz	C_D	-	1.5	2	pF
Shunt Resistance	V=10mA	R_s	40	-	-	MΩ
Responsitivity	V_R=5V, λ=1300nm	R	0.8	0.83	-	A/W
	V_R=5V, λ=1550nm		0.9	0.95	-	

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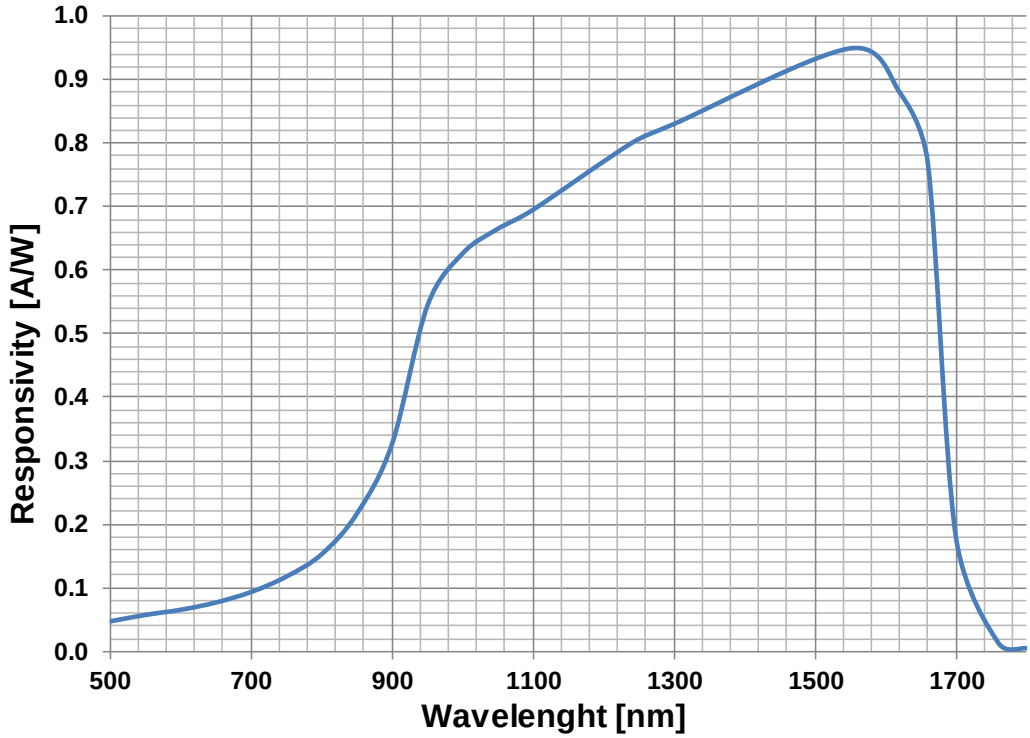
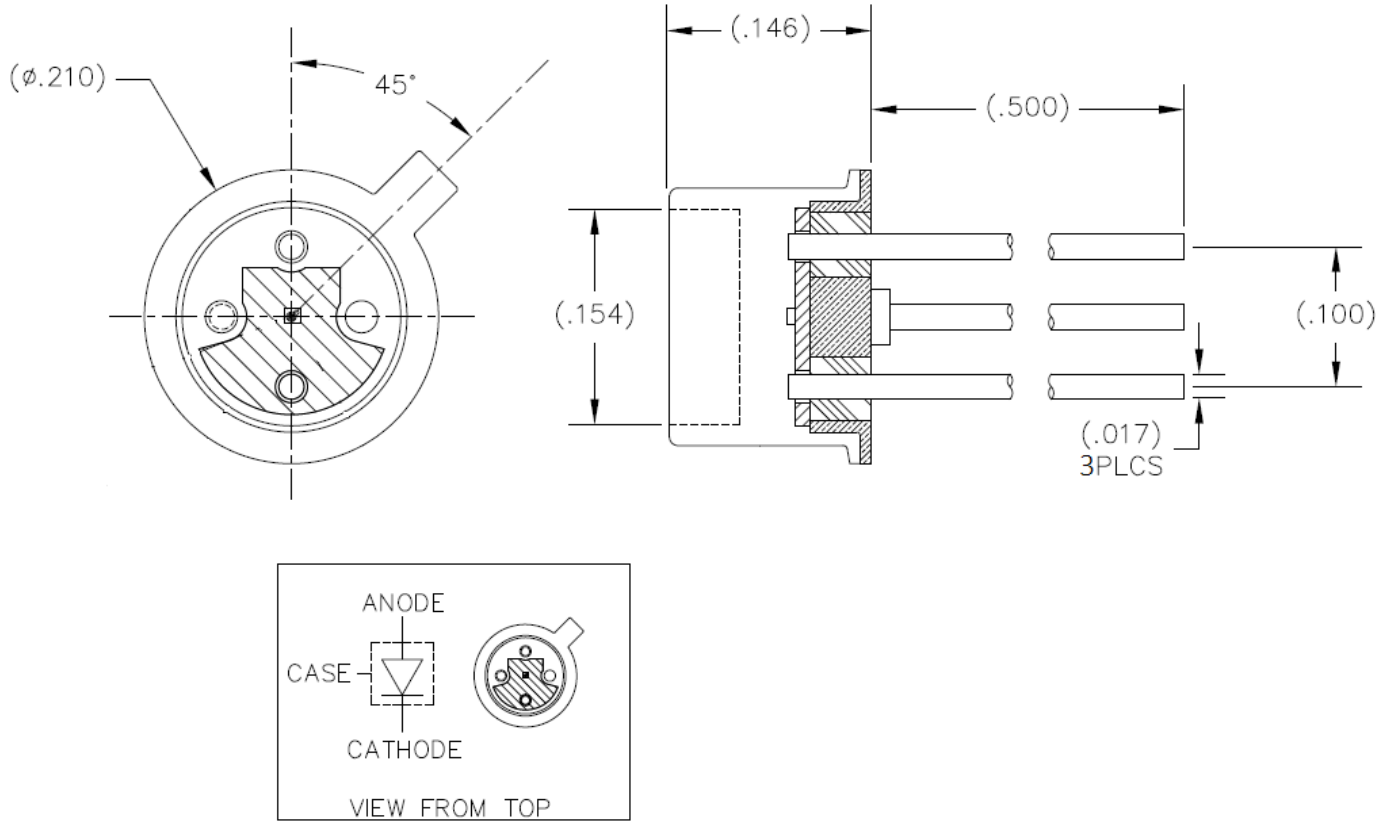
> Spectral Response



> TO-46 Package



>Soldering Conditions: 260˚C 1/16 inch away from case for 3 seconds max.

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MATERIALS SAFETY

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

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