

SD0090-3111-185



FEATURES

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

DESCRIPTION

The SD0090-3111-185 is a high sensitivity, low noise, 0.3 mm diameter active area InGaAs photodiode for detection at SWIR, NIR wavelengths for imaging and sensing applications. The photodetector is assembled in an 1206 package.

APPLICATIONS

- Industrial Sensing
- Security
- Communication
- Medical

> Absolute Maximum Ratings

	Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
Ī	SD0090-3111-185	900 to 1700	20	-40 to +100	-55 to +125	1206

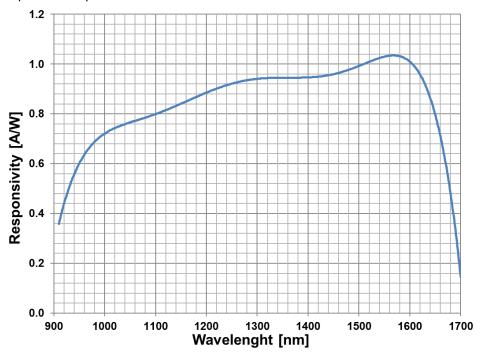
> Electrical and Optical Characteristics

Typical Characteristics (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Breakdown Voltage	I _R =1µA	V_{BD}	20	-	-	V
Dark Current	V _R =10V	l _d	-	0.2	1	nA
Forward Voltage	I _f =3mA	Vf	-	0.6	0.8	V
Diode Capacitance	V _R =5V, F=1MHz	CD	-	5	6	pF
Full Width at Halt Max.		φ	-	65	-	+/- deg
Shunt Resistance	V=10mA	Rs	40	-	-	МΩ
Donner eith ite :	V _R =5V, λ=1300nm	R	0.9	0.95	-	A/W
Responsitivity	V _R =5V, λ=1500nm	K	0.95	1	-	

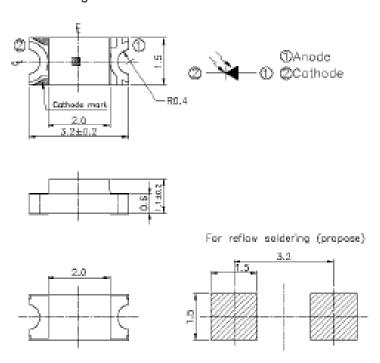
> Soldering

Concorning							
Recommendation							
Wave	Not Advised	-					
IR Oven Reflow	Allowed	See Reflow Profile					
Forced Convection Reflow	Recommended	See Reflow Profile					
Convection Reflow	Recommended	See Reflow Profile					
Vapor Phase Reflow	Recommended	See Reflow Profile					
Manual	Allowed	260°C for 3 seconds max.					
Moisture Sensitivity Level	3	J-STD-033					

> Spectral Response



> 1206 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.