



SD0800-3111-011

1.0mm Active Area InGaAs Photodiode

The SD0800-3111-011 is a high sensitivity, low noise, 1mm diameter large active area InGaAs photodiode with superb responsivity between 1100nm and 1700nm. The photodiode is assembled in a TO-46 package with a flat window cap.

Applications

Industrial Sensing

Infrared Instrumentation

Communication

Medical

Features

Low Dark Current and Capacitance

High Responsivity

Spectral Range 900-1700nm

Hermetic

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Reverse Voltage	V_R	-	20	V
Operating Temperature	T_{OP}	-40	+100	°C
Storage Temperature	T_{STG}	-55	+125	°C

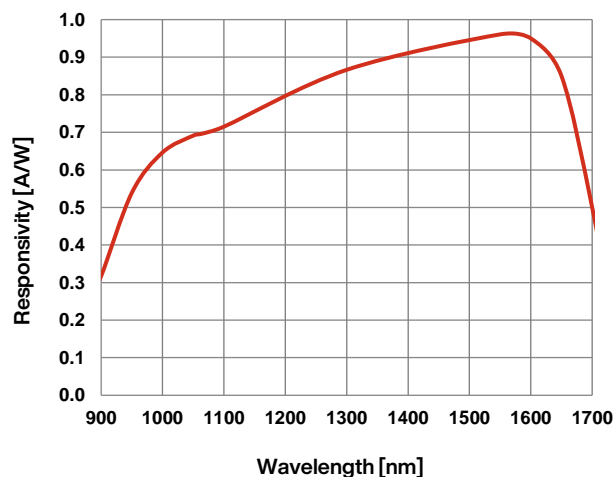
Package

TO-46

Typical Electro-Optical Specifications at $T_A=23\text{ °C}$

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Active Area	-	A.A.	-	0.79	-	mm ²
Spectral Range	-	$\Delta\lambda$	900	-	1700	nm
Responsivity	$V_R=5V, \lambda=1300nm$	R_λ	0.8	0.83	-	A/W
	$V_R=5V, \lambda=1550nm$	R_λ	0.9	0.95	-	A/W
Capacitance	$V_R=5V; f=1MHz$	C_D	-	75	100	pF
Shunt Resistance	$V_R=10mA$	R_{SH}	40	-	-	M Ω
Dark Current	$V_R=1V$	I_D	-	0.5	4	nA
Forward Voltage	$I_f=3mA$	V_f	-	-	0.8	V

Typical Spectral Response



Mechanical Specifications

Units are in inches [mm]

