

# SD041-11-33-211

## Low Capacitance Silicon Photodiode

The SD041-11-33-211 is a 1.02x0.84mm active area, silicon PIN photodiode packaged in a hermetically sealed, 3-pin isolated TO-46 metal package.

### Applications

Instrumentation

Medical

Industrial

Analytical Equipment

### Features

Low Capacitance

Red Enhanced

High Shunt Resistance

Isolated Anode and Cathode

0.85mm<sup>2</sup> Active Area

## Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Reverse Voltage	$V_R$	-	75	V
Operating Temperature	$T_{OP}$	-40	+125	°C
Storage Temperature	$T_{STG}$	-55	+150	°C

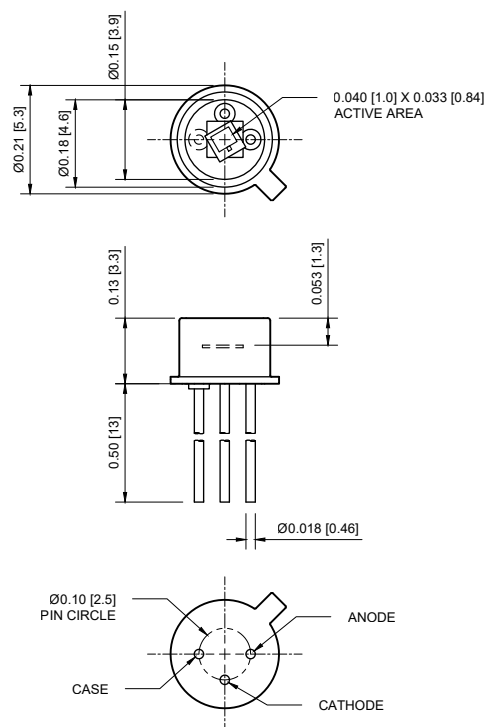
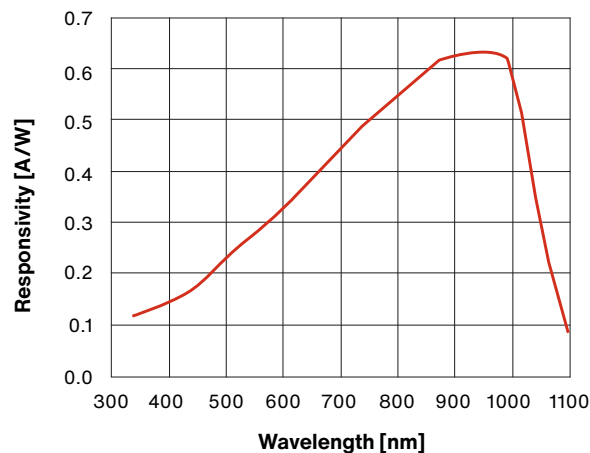
Package

TO-46

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

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Active Area	-	A.A.	-	0.86	-	mm <sup>2</sup>
Active Area Dimensions	-	A.A. <sub>D</sub>	-	1.02x0.84	-	mm
Spectral Range	Spot Scan	$\Delta\lambda$	350	-	1100	nm
Responsivity	$\lambda$ =Peak, $V_R=0V$	$R_\lambda$	0.50	0.65	-	A/W
Capacitance	$V_R=0V$ , F=1MHz	$C_J$	-	3	-	pF
	$V_R=50V$ , F=1MHz	$C_J$	-	1	-	pF
Dark Current	$V_R=50V$	$I_D$	-	2	8	nA
Noise Equivalent Power	$V_R=5V$ @ $\lambda=950nm$	NEP	-	$4.8 \times 10^{-14}$	-	W/ $\sqrt{Hz}$
Rise Time*	$R_L=50\Omega$ , $V_R=0V$	$T_R$	-	10,000	-	ns
	$R_L=50\Omega$ , $V_R=50V$	$T_R$	-	60	-	ns

## Typical Spectral Response



Units are in inches [mm]