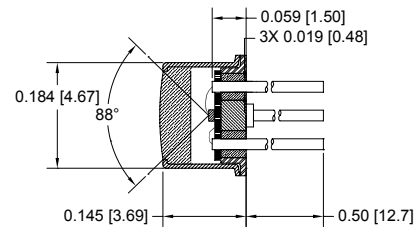
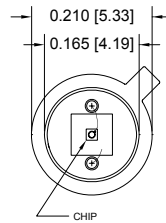
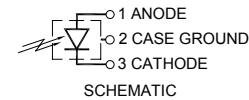
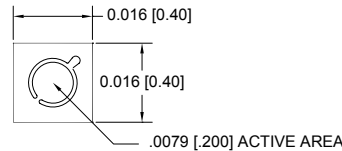




PACKAGE DIMENSIONS INCH [mm]



CHIP DIMENSIONS INCH [mm]



TO-46 PACKAGE

FEATURES

- Low noise
- Low dark current
- High response

DESCRIPTION

The **SD 012-11-41-211** is a high sensitivity low noise characteristics InGaAs photodiode packaged in a leaded hermetic TO-46 metal package.

APPLICATIONS

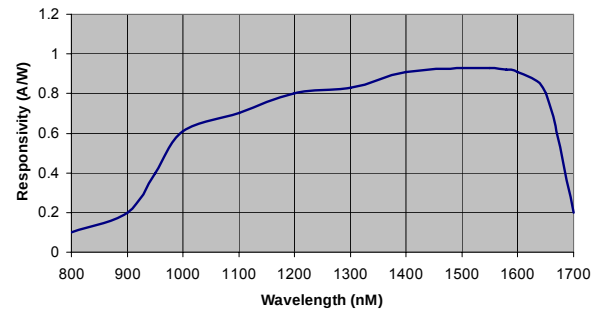
- Communication
- Industrial
- Medical

ABSOLUTE MAXIMUM RATING (TA = 23°C UNLESS OTHERWISE NOTED)

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		75	V
T_{STG}	Storage Temperature	-55	+100	°C
T_O	Operating Temperature	-40	+85	°C
T_S	Soldering Temperature*		+260	°C

* 1/16 inch from case for 3 seconds max.

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS RATING (TA = 23°C UNLESS OTHERWISE NOTED)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_D	Dark Current	$V_R = 5V$		1	5.0	nA
R_{SH}	Shunt Resistance	$V_R = 10 mV$	50	150		$M\Omega$
C_J	Junction Capacitance	$V_R = 5V, f = 1 MHz$		6	9	pF
λ_{range}	Spectral Application Range	Spot Scan	800		1700	nm
R	Responsivity	$\lambda = 1310nm, V_R = 5V$	0.83	0.92		A/W
V_{BR}	Breakdown Voltage	$I = 1 \mu A$		18		V
NEP	Noise Equivalent Power	$V_R = 5V @ \lambda = 1310nm$		1.79×10^{-14}		$W/\sqrt{Hz}$
t_r	Response Time**	$RL = 50 \Omega, V_R = 5V$			1.15	nS

**Response time of 10% to 90% is specified at 1310nm wavelength light.

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.