

### 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

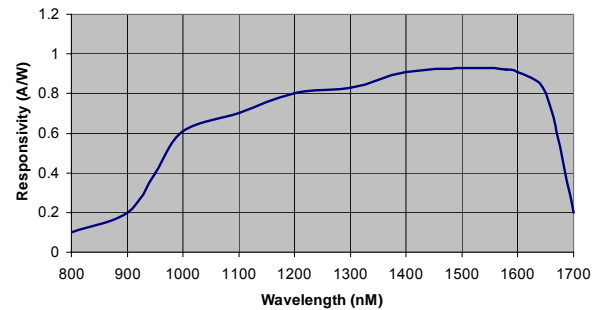
- Communication
- Industrial
- Medical

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V <sub>BR</sub>	Reverse Voltage		75	V
T <sub>STG</sub>	Storage Temperature	-55	+100	°C
T <sub>O</sub>	Operating Temperature	-40	+85	°C
T <sub>S</sub>	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 <sub>D</sub>	Dark Current	V <sub>R</sub> = 5V		1	5.0	nA
R <sub>SH</sub>	Shunt Resistance	V <sub>R</sub> = 10 mV	50	150		MΩ
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> = 5V, f = 1 MHz		6	9	pF
λ range	Spectral Application Range	Spot Scan	800		1700	nm
R	Responsivity	λ = 1310nm, V <sub>R</sub> = 5V	0.83	0.92		A/W
V <sub>BR</sub>	Breakdown Voltage	I = 1μA		18		V
NEP	Noise Equivalent Power	V <sub>R</sub> = 5V @ λ = 1310nm		1.79X10 <sup>-14</sup>		W/√Hz
t <sub>r</sub>	Response Time**	RL = 50 Ω, V <sub>R</sub> = 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.