

#### **FEATURES**

- · Low noise
- · Low dark current
- · High response

### **DESCRIPTION**

The **SD 060-11-41-211** is a InGaAs photodiode with high sensitivity and low noise characteristics packaged in a three leaded hermetic TO-39 metal package.

### **APPLICATIONS**

- Communication
- Industrial
- Medical

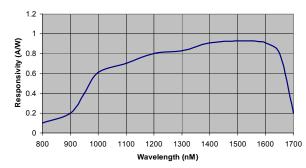


# ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
$V_{BR}$	Reverse Voltage		75	V
T <sub>STG</sub>	Storage Temperature	-55	+100	°C
To	Operating Temperature	-40	+85	°C
Ts	Soldering Temperature*		+260	°C

<sup>\* 1/16</sup> 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	$V_R = 5V$		10	50	nA
R <sub>SH</sub>	Shunt Resistance	V <sub>R</sub> = 10 mV	2	6		$\mathbf{M}\Omega$
CJ	Junction Capacitance	$V_{R} = 5V, f = 1 \text{ MHz}$		250	450	pF
$\lambda$ 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 = 1μA		18		V
NEP	Noise Equivalent Power	$V_R = 5V @ \lambda = 1310nm$		1.79X10 <sup>-14</sup>		W/ √ <sub>Hz</sub>
t <sub>r</sub>	Response Time**	RL = 50 $\Omega$ , $V_R$ = 5V			10	nS

<sup>\*\*</sup>Response time of 10% to 90% is specified at 1310nm wavelength light.

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