



**DESCRIPTION**

The **SD 200-13-23-242** is a UV enhanced silicon PIN packaged in a hermetic TO-5 metal package.

**FEATURES**

- Low Noise
- UV Enhanced
- High Shunt Resistance
- High Response

**RELIABILITY**

Contact Luna for recommendations on specific test conditions and procedures.

**APPLICATIONS**

- Instrumentation
- Industrial
- Medical

**ABSOLUTE MAXIMUM RATINGS**

SYMBOL	MIN	MAX	UNITS	T <sub>a</sub> = 23°C UNLESS OTHERWISE NOTED	
Reverse Voltage	-	- 75	V	-	-
Storage Temperature	-55	to +150	°C	-	-
Operating Temperature	-40	to +125	°C	-	-
Soldering Temperature*	-	- +240	°C	-	-

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

**OPTO-ELECTRICAL PARAMETERS**

T<sub>a</sub> = 23°C UNLESS OTHERWISE NOTED

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark Current	V <sub>R</sub> = 5V	-	6.0	30	nA
Shunt Resistance	V <sub>R</sub> = 10 mV	77	-	-	MΩ
Junction Capacitance	V <sub>R</sub> = 0V, f = 1 MHz	-	345	-	pF
	V <sub>R</sub> = 5V, f = 1 MHz	-	102	-	
Spectral Application Range	Spot Scan	250	-	1100	nm
Responsivity	λ = 365nm V, V <sub>R</sub> = 0V	0.14	0.18	-	A/W
Breakdown Voltage	I = 10 μA	-	10	-	V
Noise Equivalent Power	V <sub>R</sub> = 0V @ λ = 350nm	-	8.9x10 <sup>-14</sup>	-	W/√Hz
Response Time**	RL = 50Ω, V <sub>R</sub> = 0V	-	190	-	nS
	RL = 50Ω, V <sub>R</sub> = 10V	-	13	-	

\*\*Response time of 10% to 90% is specified at 660nm wavelength light.

**TYPICAL PERFORMANCE**

**SPECTRAL RESPONSE**

