

# SD100-13-23-222

## Silicon Photodiode

The SD 100-13-23-222 is a 2.54mm diameter (5mm<sup>2</sup>) active area UV enhanced silicon PIN packaged in a hermetic TO-5 metal package.

### Applications

Instrumentation

Industrial

Medical

Analytical Equipment

### Features

Low Noise

UV Enhanced

High Shunt Resistance

High Reponse

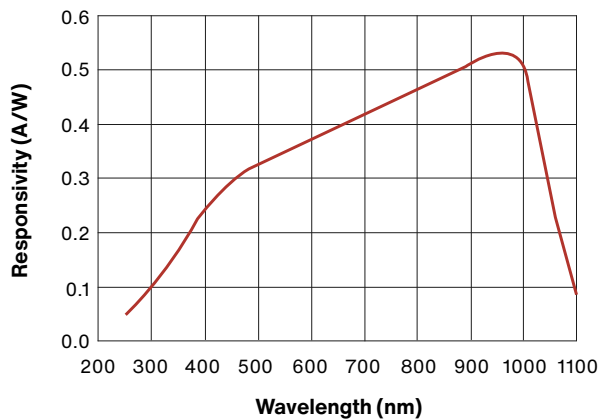
## Absolute Maximum Ratings

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

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

Parameter	Test Conditions	Symbol	Min	typ	Max	Unit
Dark Current	$V_R=5V$	$I_D$	-	1	6.5	nA
Shunt Resistance	$V_R=10mV$	$R_{SH}$	50	-	-	MΩ
Junction Capacitance	$V_R=0V; f=1MHz$	$C_J$	-	87	-	pF
	$V_R=5V; f=1MHz$	$C_J$	-	9	-	pF
Spectral Application Range	Spot Scan	$\lambda$	250	-	1100	nm
Reponsivity	$\lambda=365nm, V_R=0V$	R	0.14	0.18	-	A/W
Breakdown Voltage	$I = 10\ \mu A$	$V_{BD}$	30	50	-	V
Noise Equivalent Power	$V_R=0V @ \lambda=peak$	NEP	-	$9 \times 10^{-14}$	-	W/√Hz
Response Time (10% to 90%)	$RL=50\Omega, V_R=0V$	$T_R$	-	75	-	nS
	$RL=50\Omega, V_R=5V$	$T_R$	-	5	-	nS

## Spectral Response



## Mechanical Specifications

Units are in mm

