



Advanced Photonix

A Division of OSI Optoelectronics

SD290-12-22-241

FEATURES

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

DESCRIPTION

The **SD 290-12-22-241** is a blue enhanced silicon PIN photodiode, packaged in a hermetic TO-8 metal package.

APPLICATIONS

- Military
- Medical
- Industrial

> Absolute Maximum Ratings

Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
SD290-12-22-241	350 to 1100	25	-40 to +125	-55 to +150	TO-8

> Electrical and Optical Characteristics

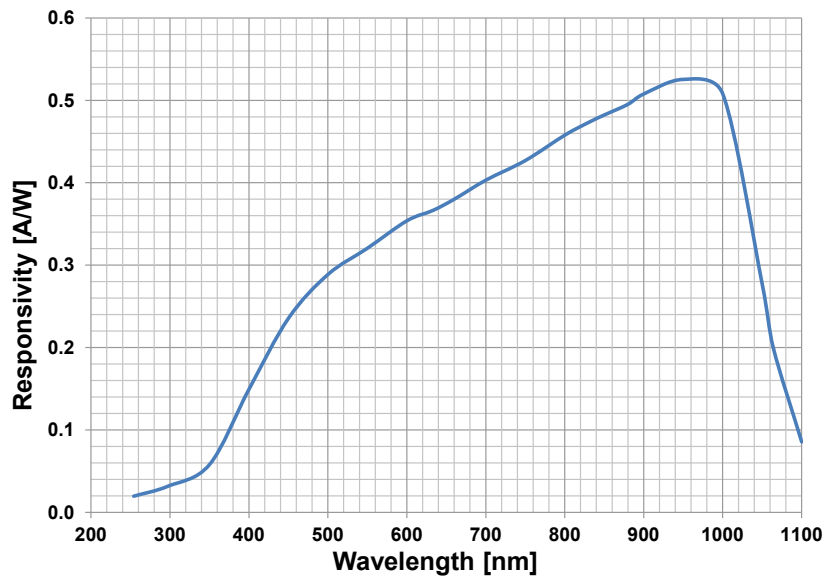
Typical Characteristics per elements (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Dark Current	$V_R = 5V$	I_D	-	-	120	nA
Shunt Resistance	$V_R = 10mV$	R_{SH}	20	-	-	MΩ
Junction Capacitance	$V_R = 0V, f = 1 MHz$	C_J	-	870	-	pF
	$V_R = 5V, f = 1 MHz$		-	255	-	
Responsivity	$\lambda = 450nm, V_R = 0V$	R	.20	.22	-	A/W
Breakdown Voltage	$I = 10 \mu A$	V_{BD}	25	-	-	V
Noise Equivalent Power	$V_R = 5V @ \lambda = 450nm$	NEP	-	9×10^{-13}	-	W/√Hz
Response Time**	$RL = 50\Omega, V_R = 0V$	T_R	-	120	-	nS
	$RL = 50\Omega, V_R = 10V$		-	15	-	

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

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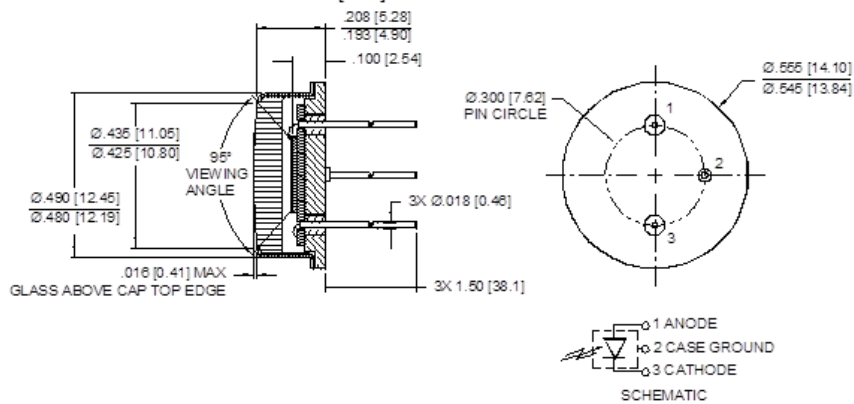
SD290-12-22-241

> Typical Spectral Response



> Package Dimensions

PACKAGE DIMENSIONS INCH [mm]



> Soldering Conditions: 260°C 1/16 inch away from case for 3 seconds max.

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MATERIALS SAFETY

This product is free of conflict minerals and meets REACH compliance. Please see website for reports.

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