

SD100-12-22-021

2.5mm Dia. Blue-Enhanced Photodiode



FEATURES

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



DESCRIPTION

The **SD100-12-22-021** is a 2.5mm diameter blue-enhanced silicon PIN photodiode, packaged in a hermetic TO-5 metal package.

APPLICATIONS

- Instrumentation
- Industrial
- Medical

> Absolute Maximum Ratings

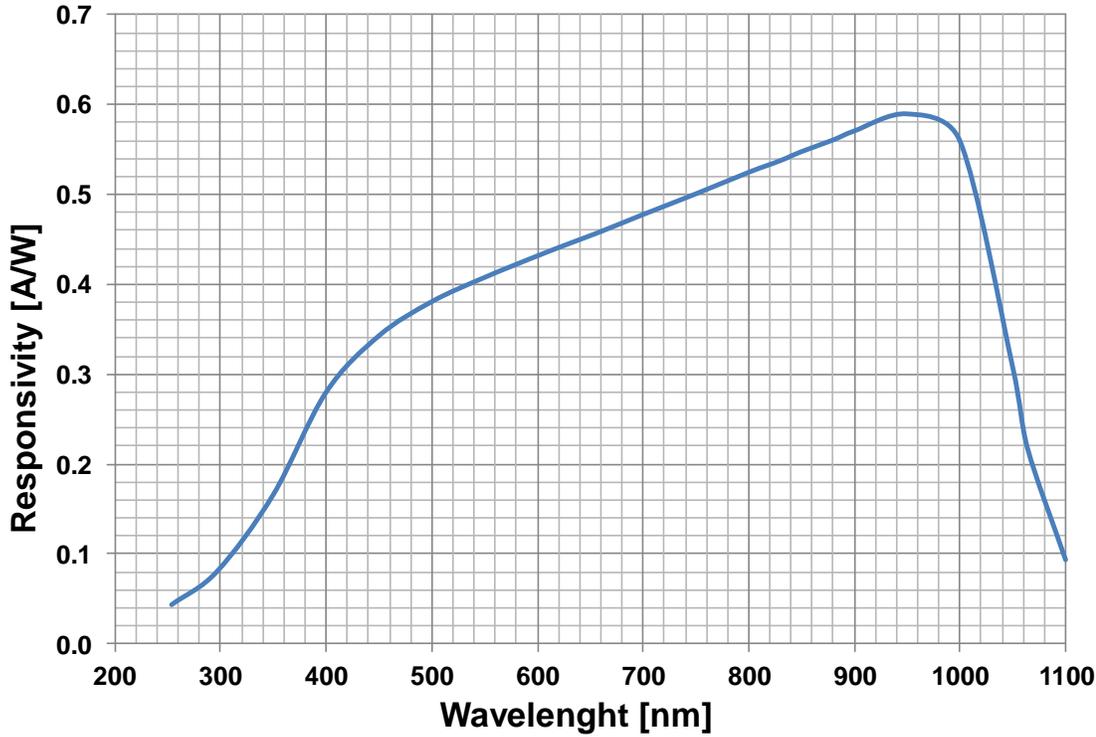
Part No.	Wavelength Range [nm]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
SD100-12-22-021	350 to 1100	75	-40 to +100	-55 to +125	TO-5

> Typical Electrical and Optical Characteristics

Typical Characteristics (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Dark Current	$V_R = 50V$	I_D	-	1.6	6.4	nA
Junction Capacitance	$V_R = 0V, f = 1 \text{ MHz}$	C_J	300	-	-	pF
	$V_R = 50V, f = 1 \text{ MHz}$		-	87	-	
Spectral Application Range	Spot Scan	λ	350	26	1100	nm
Responsivity	$\lambda=450\text{nm}, V_R=0V$	R	0.20	-	-	A/W
Breakdown Voltage	$I = 10 \mu A$	V_{BD}	25	-	-	V
Noise Equivalent Power	$V_R = 5V @ \lambda=950\text{nm}$	NEP	-	4.2×10^{-14}	-	W/√Hz
Response Time**	$RL = 50\Omega, V_R = 0V$	T_R	-	190	-	nS
	$RL = 50\Omega, V_R = 50V$		-	13	-	

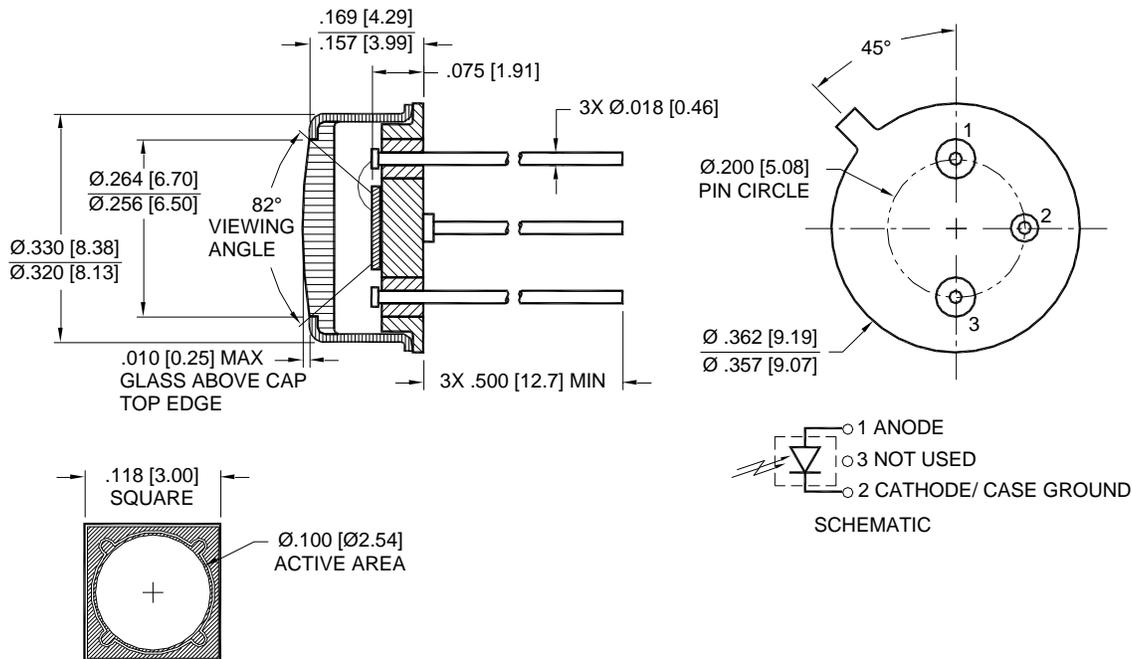
**Response time of 10% to 90% is specified at 660nm wavelength light.

> Typical Spectral Response



> Mechanical Specifications

Units are in inches [mm]



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MATERIALS SAFETY

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