



DESCRIPTION

The **SD 100-12-22-021** is a blue enhanced silicon PIN photodiode, packaged in a hermetic TO-5 metal package.

FEATURES

- Low Noise
- Blue 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	
Reverse Voltage	-	75	V	T _a = 23°C UNLESS OTHERWISE NOTED
Storage Temperature	-55	+150	°C	-
Operating Temperature	-40	+125	°C	-
Soldering Temperature*	-	+240	°C	-

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

OPTO-ELECTRICAL PARAMETERS

T_a = 23°C UNLESS OTHERWISE NOTED

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark Current	V _R = 50V	-	1.6	6.4	nA
Junction Capacitance	V _R = 0V, f = 1 MHz	300	-	-	pF
	V _R = 50V, f = 1 MHz	-	87	-	
Spectral Application Range	Spot Scan	350	26	1100	nm
Responsivity	λ = 900nm, V _R = 0V	0.20	-	-	A/W
Breakdown Voltage	I = 10 μA	-	0.28	-	V
Noise Equivalent Power	V _R = 5V @ λ = 950nm	-	4.2x10 ⁻¹⁴	-	W/√Hz
Response Time**	RL = 50Ω, V _R = 0V	-	190	-	nS
	RL = 50Ω, V _R = 50V	-	13	-	

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

