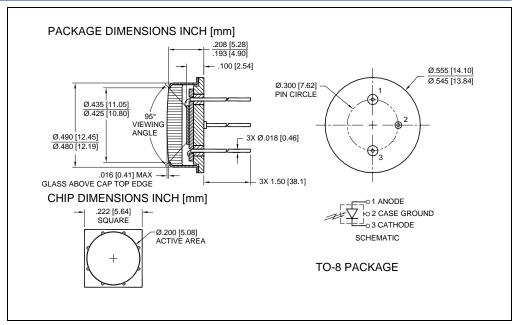


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## **Precision – Control – Results**





#### **DESCRIPTION**

The **SD 200-12-22-241** is a blue enhanced silicon PIN photodiode, packaged in a hermetic TO-8 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 <sub>a</sub> = 23°C UNLESS OTHERWISE NOTED
Storage Temperature	-55	to	+150	°C	-
Operating Temperature	-40	to	+125	°C	-
Soldering Temperature*	-	-	+240	°C	-

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



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# **Precision – Control – Results**

# **OPTO-ELECTRICAL PARAMETERS**

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

PARAMETER	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS	
Dark Current	V <sub>R</sub> = 50V	-	6.5	26.0	nA	
Shunt Resistance	V <sub>R</sub> = 10 mV	70	-	-	ΜΩ	
Junction Capacitance	$V_R = 0V, f = 1 MHz$	-	345	-	ъГ	
	V <sub>R</sub> = 50V, <i>f</i> = 1 MHz	-	102	-	pF	
Spectral Application Range	Spot Scan	350	-	1100	nm	
Responsivity	λ= 900nm, V <sub>R</sub> =0V	0.20	0.28	-	A/W	
Breakdown Voltage	Ι = 10 μΑ	-	50	-	V	
Noise Equivalent Power	V <sub>R</sub> = 5V@ λ=950nm	-	8.9x10 <sup>-14</sup>	-	W/√ <sub>Hz</sub>	
Response Time**	$RL = 50\Omega$ , $V_R = 0V$	-	190	-		
	$RL = 50\Omega$ , $V_R = 50V$	-	13		– nS	

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

## **TYPICAL PERFORMANCE**

### **SPECTRAL RESPONSE**

