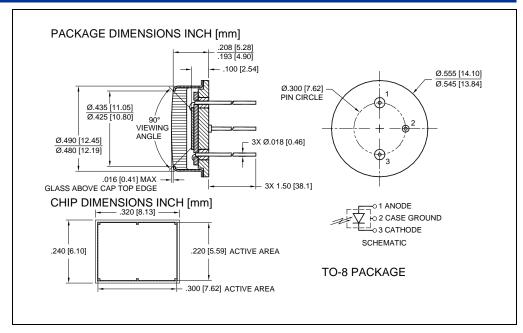


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DESCRIPTION

The **SD 290-11-31-241** is an ultra low capacitance silicon PIN photodiode, red enhanced, packaged in a leaded hermetic TO-8 metal package.

FEATURES

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

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Military
- Industrial
- Medical



ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN		MAX	UNITS	
Reverse Voltage	-	-	75	V	T _a = 23°C UNLESS OTHERWISE NOTED
Storage Temperature	-55	to	+150	°C	-
Operating Temperature	-40	to	+125	°C	-
Soldering Temperature*	-	-	+240	°C	-

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

SD290-11-31-241

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OPTO-ELECTRICAL PARAMETERS

T_a = 23°C UNLESS OTHERWISE NOTED

PARAMETER	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS	
Dark Current	V _R = 50V	-	110	425	nA	
Junction Capacitance	$V_R = 0V, f = 1 MHz$	-	235	-	n.E	
	$V_R = 50V, f = 1 \text{ MHz}$	-	22	-	pF	
Spectral Application Range	Spot Scan	350	-	1100	nm	
Responsivity	λ = 900nm, V_R =0 V	0.50	0.55	-	A/W	
Breakdown Voltage	Ι = 10 μΑ	-	75	-	V	
Noise Equivalent Power	V _R = 5V@ λ=950nm	-	3.8x10 ⁻¹³	-	W/ √ _{Hz}	
Response Time**	$RL = 50\Omega, V_R = 0V$	-	190	-	0	
	$RL = 50\Omega, V_R = 50V$	-	8	-	nS	

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

