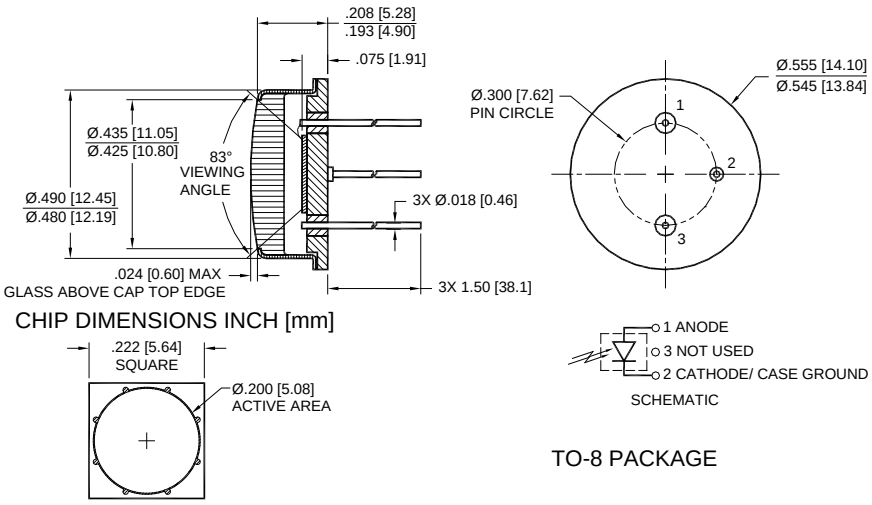
UV Enhanced Silicon Photodiode

SD 200-13-23-042

WWW.LUNAINC.COM **Precision – Control – Results**



DESCRIPTION

The **SD 200-13-23-042** is a UV enhanced silicon PIN packaged in a hermetic TO-5 metal package.

FEATURES

- Low Noise
- UV 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	T_a = 23°C UNLESS OTHERWISE NOTED
Reverse Voltage	-	-	75	V	-
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.

REV 01-04-16

Luna Optoelectronics, 1240 Avenida Acaso, Camarillo CA 93012 • Phone (805) 987-0146 • Fax (805) 484-9935

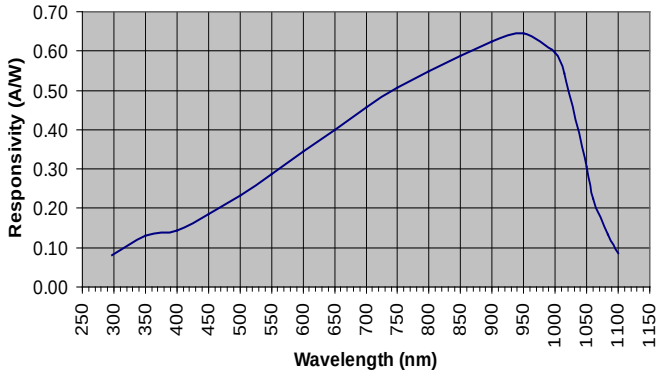
OPTO-ELECTRICAL PARAMETERS

T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Dark Current	V_R = 5V	-	6.0	30	nA
Shunt Resistance	V_R = 10 mV	77	-	-	MΩ
Junction Capacitance	V_R = 0V, *f* = 1 MHz	-	345	-	pF
	V_R = 5V, *f* = 1 MHz	-	102	-	
Spectral Application Range	Spot Scan	250	-	1100	nm
Responsivity	λ= 365nm V, V_R =0V	0.14	0.18	-	A/W
Breakdown Voltage	I = 10 μA	-	10	-	V
Noise Equivalent Power	V_R = 0V@ λ=365nm	-	$8.9x10^{-14}$	-	$W/\sqrt{Hz}$
Response Time	RL = 50Ω, V_R =0V	-	190	-	nS
	RL = 50Ω, V_R =10V	-	13	-	

TYPICAL PERFORMANCE

SPECTRAL RESPONSE



Luna Optoelectronics, 1240 Avenida Acaso, Camarillo CA 93012 • Phone (805) 987-0146 • Fax (805) 484-9935