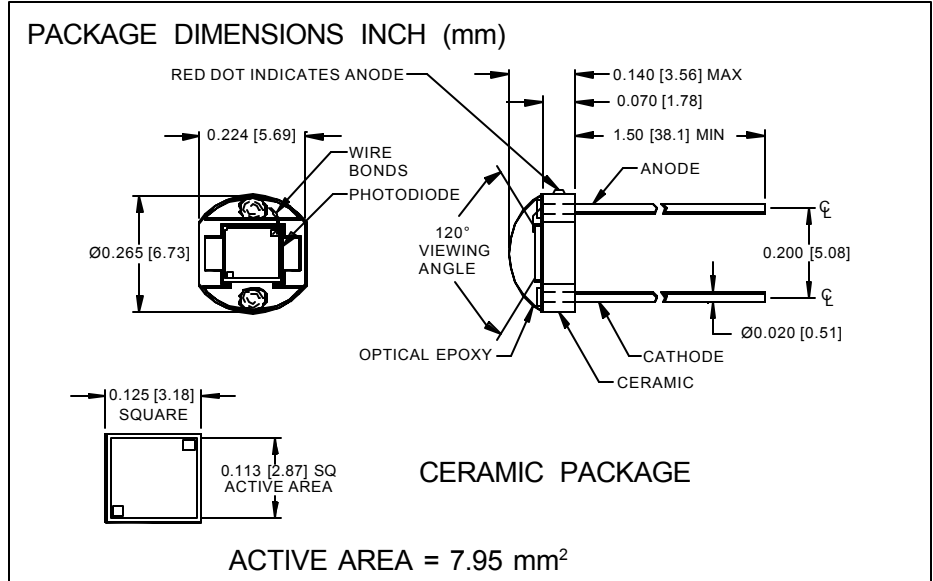


PHOTONIC DETECTORS INC.

Silicon Photodiode, U.V. Enhanced Photovoltaic Type PDU-V113



FEATURES

- Low noise
- U.V. enhanced
- High shunt resistance
- High response

DESCRIPTION

The **PDU-V113** is a silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for low noise photovoltaic applications. Packaged on a two lead ceramic substrate with a clear U.V. epoxy glob top.

APPLICATIONS

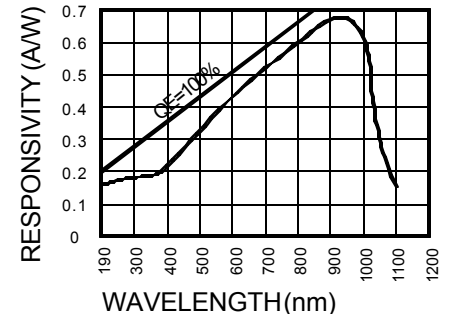
- U.V. exposure meter
- Water purification
- Fluorescence
- U.V. A & B meters

ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		75	V
T _{STG}	Storage Temperature	-40	+100	°C
T _O	Operating Temperature Range	-40	+90	°C
T _S	Soldering Temperature*		+240	°C
I _L	Light Current		500	mA

*1/16 inch from case for 3 secs max

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{SC}	Short Circuit Current	H = 100 fc, 2850 K	60	80		μA
I _D	Dark Current	H = 0, V _R = 10 V		300	500	pA
R _{SH}	Shunt Resistance	H = 0, V _R = 10 mV	100	200		MΩ
TC R _{SH}	R _{SH} Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C
C _J	Junction Capacitance	H = 0, V _R = 0 V**		800		pF
λ _{range}	Spectral Application Range	Spot Scan	250		1100	nm
λ _p	Spectral Response - Peak	Spot Scan		850		nm
V _{BR}	Breakdown Voltage	I = 10 μA	30	50		V
NEP	Noise Equivalent Power	V _R = 10 mV @ Peak		6x10 ⁻¹⁴		W / √Hz
t _r	Response Time	R _L = 1 KΩ V _R = 0 V		750		nS

Information in this technical data sheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice. **f = 1 MHz

[FORM NO. 100-PDU-V113 REV A]