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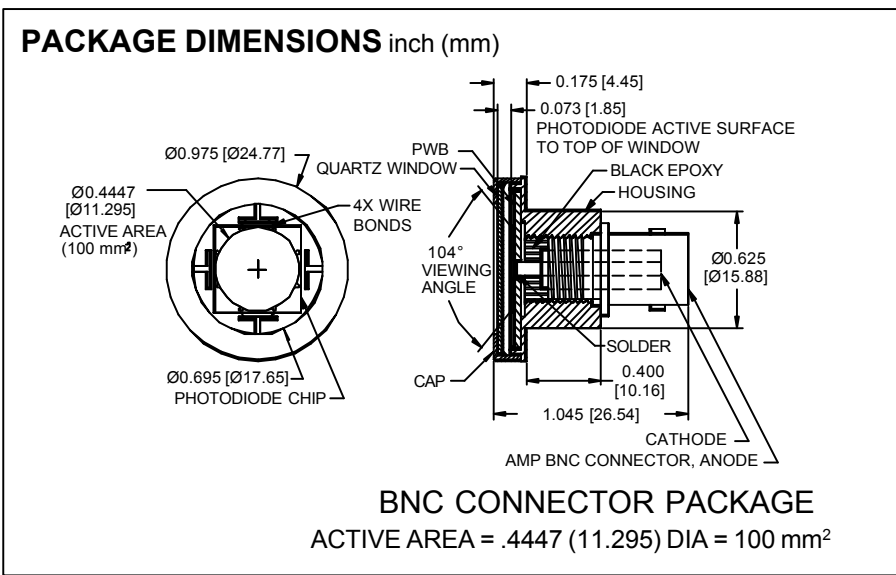
[Advanced Photonix, Inc.](#)  
[PDU-V112Q](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# PHOTONIC DETECTORS INC.

## Silicon Photodiode, U.V. Enhanced Photovoltaic Type PDU-V112-Q



### FEATURES

- Low noise
- U.V. enhanced
- High shunt resistance
- Quartz window

### DESCRIPTION

The **PDU-V112-Q** is a large area, instrumentation grade, U.V. enhanced silicon photodiode. Designed for low noise photovoltaic applications. Packaged in a BNC connector package.

### APPLICATIONS

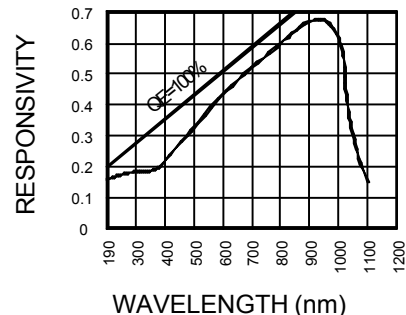
- Instrumentation
- Power meters
- Colorimeters
- Laser power meters

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
VBR	Reverse Voltage		30	V
TS	Storage Temperature	-20	+70	°C
TO	Operating Temperature Range	-10	+60	°C
TS	Soldering Temperature*	N/A	N/A	°C
I <sub>max</sub>	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
ISC	Short Circuit Current	H = 100 fc, 2850 K	.09	1.2		mA
I <sub>D</sub>	Dark Current	H = 0, VR = 10 mV		200	330	pA
RSH	Shunt Resistance	H = 0, VR = 10 mV	30	50		MΩ
TCRSH	RSH Temp. Coefficient	H = 0, VR = 10 mV		-8		% / °C
CJ	Junction Capacitance	H = 0, VR = 0 V**		10,000	12,000	pF
λ range	Spectral Application Range	Spot Scan	190		1100	nm
R	Responsivity	V <sub>R</sub> = 0 V, λ = 254 nm	.12	.18		A/W
VBR	Breakdown Voltage	I = 10 μA	5	10		V
NEP	Noise Equivalent Power	VR = 10 @ Peak		2x10 <sup>-14</sup>		W/ √Hz
tr	Response Time	RL = 1 KΩ VR = 0 V		2,000		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