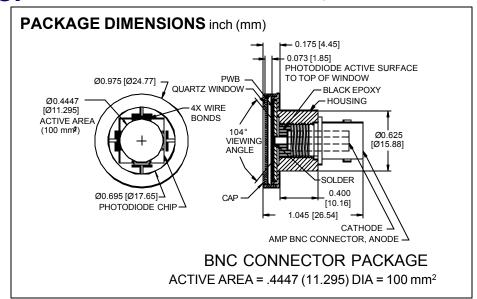
PHOTONIC DETECTORS INC.

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

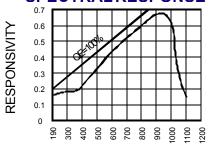
- Instrumentation
- Power meters
- Colorimeters
- Laser power meters

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	∞
lmax	Light Current		500	mA

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

SPECTRAL RESPONSE



WAVELENGTH (nm)

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 _D	Dark Current	H = 0, VR = 10 mV		200	330	рА
RSH	Shunt Resistance	H = 0, VR = 10 mV	30	50		$\mathbf{M}\Omega$
TCRSH	RSH Temp. Coefficient	H = 0, VR = 10 mV		-8		%/℃
CJ	Junction Capacitance	H = 0, VR = 0 V**		10,000	12,000	рF
λrange	Spectral Application Rang	e Spot Scan	190		1100	nm
R	Responsivity	V_R = 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 ⁻¹⁴		W/ √Hz
tr	Response Time	RL = 1 KΩ VR = 0 V		2,000		nS