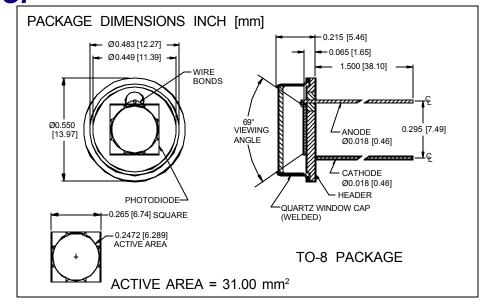
PHOTONIC DETECTORS INC.

Silicon Photodiode, U.V. Enhanced Photovoltaic Type PDU-V108-Q





RESPONSIVITY (A/W)

FEATURES

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

DESCRIPTION

The **PDU-V108-Q** is a silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for low noise photovoltaic applications. Packaged in a TO-8 metal can with a flat quartz window.

APPLICATIONS

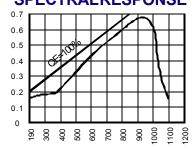
- Spectrometers
- Fluorescent analysers
- U.V. meters
- Colorimeters

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		75	V
T _{STG}	Storage Temperature	-55	+150	⊙C
To	Operating Temperature Range	-40	+125	⊙C
Ts	Soldering Temperature*		+240	∘C
IL	Light Current		500	mA

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

SPECTRALRESPONSE



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	375	430		μ A		
ΙD	Dark Current	$H = 0, V_R = 10 \text{ mV}$		10	50	pA		
Rsh	Shunt Resistance	H = 0, V _R = 10 mV	.2	1		GΩ		
TC R _{SH}	RsH Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / ℃		
Сл	Junction Capacitance	H = 0, V _R = 0 V**		2500		рF		
λrange	Spectral Application Range	Spot Scan	190		1100	nm		
R	Responsivity	V_R = 0 V, λ = 254 nm	.12	.18		A/W		
V _{BR}	Breakdown Voltage	I = 10 μA	5	10		V		
NEP	Noise Equivalent Power	V _R = 10 mV @ Peak		5x10 ⁻¹⁴		W/ √ Hz		
tr	Response Time	RL = 1 KΩ V _R = 0 V		950		nS		