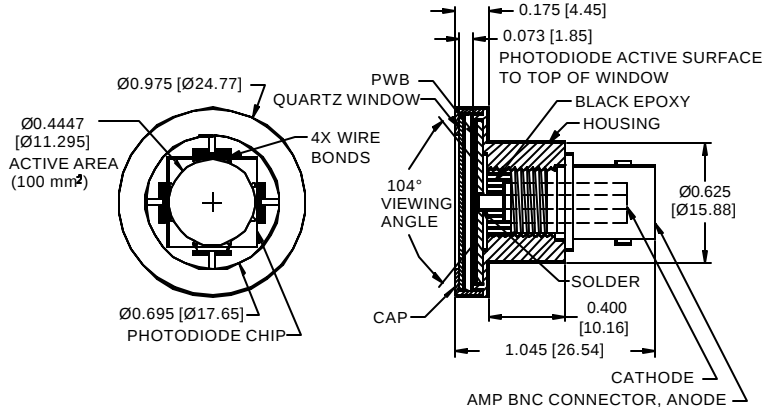


PHOTONIC DETECTORS INC.

Silicon Photodiode, U.V. Enhanced Photoconductive Type PDU-C112-Q



PACKAGE DIMENSIONS inch (mm)



BNC CONNECTOR PACKAGE
 ACTIVE AREA = .4447 (11.295) DIA = 100 mm²

FEATURES

- High speed
- U.V. enhanced
- Low capacitance
- Quartz window

DESCRIPTION

The **PDU-C112-Q** is a large area, instrumentation grade, U.V. enhanced silicon photodiode. Designed for low capacitance high speed photoconductive applications. Packaged in a BNC connector package.

APPLICATIONS

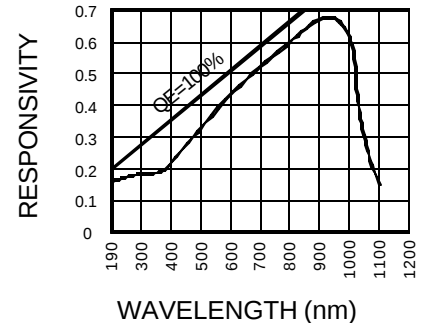
- Instrumentation
- Power meters
- Colorimeters
- Laser power meters

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 _{max}	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	1.0	1.3		mA
I _D	Dark Current	H = 0, V _R = 5 V		10	30	nA
RSH	Shunt Resistance	H = 0, V _R = 10 mV	7	15		MΩ
TCRSH	RSH Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C
CJ	Junction Capacitance	H = 0, V _R = 5 V**		600		pF
λ _{range}	Spectral Application Range	Spot Scan	190		1100	nm
R	Responsivity	V _R = 0 V, λ = 254 nm	.12	.18		A/W
VBR	Breakdown Voltage	I = 10 μA	15	25		V
NEP	Noise Equivalent Power	V _R = 10 @ Peak		1.5x10 ⁻¹³		W/ √Hz
tr	Response Time	R _L = 1 KΩ V _R = 5 V		350		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-C112-Q REV N/C]