Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

Advanced Photonix, Inc.
PDU-C120

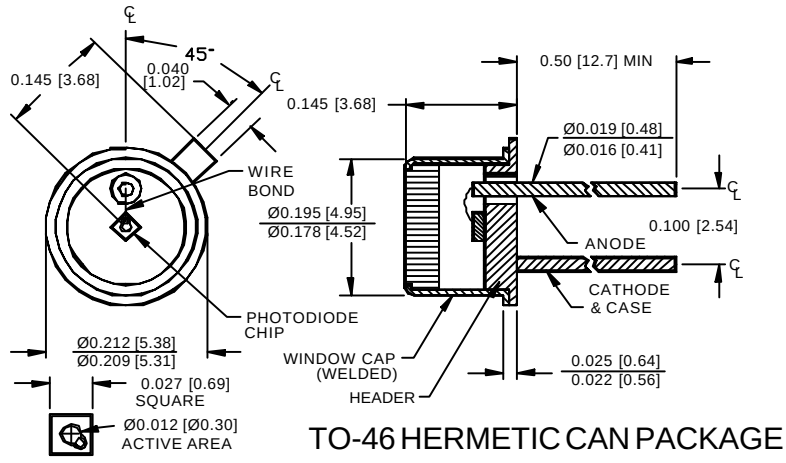
For any questions, you can email us directly:
sales@integrated-circuit.com

PHOTONIC DETECTORS INC.

High Speed Silicon Photodiode, U.V. Enhanced Photoconductive

Type PDU-C120

PACKAGE DIMENSIONS INCH [mm]



TO-46 HERMETIC CAN PACKAGE

ACTIVE AREA = 0.073 mm^2

FEATURES

- High speed
- Low cost
- Hermetically sealed
- Passivated

DESCRIPTION

The **PDU-C120** is a high speed silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for high speed U.V., laser detection, switching, and logic applications. Packaged in a hermetic TO-46 metal can with a flat U.V. transmitting window.

APPLICATIONS

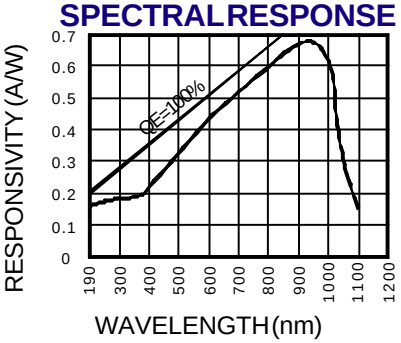
- Medical laser
- Light demodulation
- Laser detection
- U.V. receiver

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		30	V
T_{STG}	Storage Temperature	-65	+150	°C
T_O	Operating Temperature Range	-55	+125	°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	1.2	1.5		μA
I_D	Dark Current	H = 0, V_R = 5 V		0.5	2.0	nA
R_{SH}	Shunt Resistance	H = 0, V_R = 10 mV	200	250		MΩ
TCR_{SH}	RSH Temp. Coefficient	H = 0, V_R = 10 mV		-8		% / °C
C_J	Junction Capacitance	H = 0, V_R = 5 V**		20		pF
λrange	Spectral Application Range	Spot Scan	190		1100	nm
R	Responsivity	V_R = 0 V, λ = 254 nm	.15	.18		A/W
V_{BR}	Breakdown Voltage	I = 10 μA	15	25		V
NEP	Noise Equivalent Power	V_R = 10 mV @ Peak		$9.0x10^{-15}$		W/$\sqrt{Hz}$
tr	Response Time	RL = 1 KΩ V_R = 5 V		5		nS