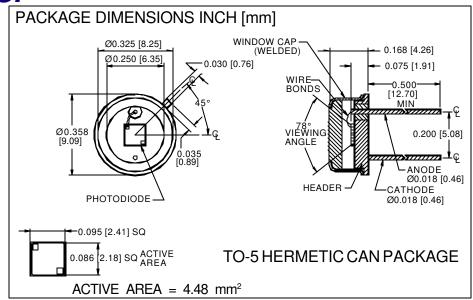
PHOTONIC Silicon Photodiode, U.V. Enhanced Photoconductive **DETECTORS INC.** Type PDU-C105





FEATURES

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

DESCRIPTION

The **PDU-C105** is a silicon, PIN planar diffused, U.V. enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic TO-5 metal can with a U.V. transmitting window.

APPLICATIONS

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

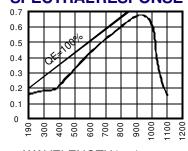
RESPONSIVITY (A/W)

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V BR	Reverse Voltage		30	V
T _{STG}	Storage Temperature	-55	+150	⊙C
To	Operating Temperature Range	-40	+125	⊙C
Ts	Soldering Temperature*		+240	∘C
I _L	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	40	56		μΑ
ΙD	Dark Current	$H = 0, V_R = 5 V$		1.0	5.0	nA
RsH	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$.25	1.0		GΩ
TC Rsh	RSH Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/°C
Сл	Junction Capacitance	$H = 0, V_R = 5 V^{**}$		37		рF
λrange	Spectral Application Range	Spot Scan	190		1100	nm
R	Responsivity	$V_R = 0 \text{ V}, \lambda = 254 \text{ nm}$.12	.18		A/W
V _{BR}	Breakdown Voltage	I = 10 µ A	15	25		V
NEP	Noise Equivalent Power	V _R = 10 mV @ Peak		1.3x10 ⁻¹⁴		W/√ _{Hz}
tr	Response Time	$RL = 1 K\Omega V_R = 5 V$		50		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