

Excellent Integrated System Limited

Stocking Distributor

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

Advanced Photonix, Inc. PDB-V104-I

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



Distributor of Advanced Photonix, Inc. : Excellent Integrated System Limited Datasheet of PDB-V104-I - PHOTODIODE BLUE 2.98MM SQ TO-18 Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com

> WINDOW CAF (WELDED)

WIRE BONDS

HEADER

RESPONSIVITY (AW)

0.6 0.5 0.4 0.3 0.2 0.1

Ø0.100 B.C. PHOTODIODE CHIP

0.040 [1.02]

₽€ 45°

0.042 [1.06]

0.046 [1.17] ACTIVE AREA

0.104 [2.64] ACTIVE AREA

0.125 [3,18]

ACTIVE AREA = 2.98 mm²

Ø0.019[0.48] Ø0.016[0.41] 3 PLACES

PHOTONIC Silicon Photodiode, Blue Enhanced Photovoltaic DETECTORS INC. Isolated Type PDB-V104-I PACKAGE DIMENSIONS INCH [mm]

Ø0.184 [4.67]

Ø0.210 [5.33]

0.066

Ø0.155[3.94]



FEATURES

Low noise

• Blue enhanced

High response

High shunt resistance

DESCRIPTION

The **PDB-V104-I** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for low noise photovoltaic applications. Packaged in a hermetic TO-18 metal can with a flat window and isolated ground lead.

APPLICATIONS

CASE GROUND

TO-18 HERMETIC CAN PACKAGE

Instrumentation

0.198 [5.03]

0.125 [3.18]

CATHODE

ANODE

- Character recognition
- Laser detection
- Industrial controls

SPECTRAL RESPONSE

190 300 500 600 700 800 800 900

WAVELENGTH (nm)

100

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
Τ _ο	Operating Temperature Range	-40	+125	°C
T _s	Soldering Temperature*		+240	°C
Ι	Light Current		0.5	mA

*1/16 inch from case for 3 secs max

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	35	40		mA
I _D	Dark Current	H = 0, V _R = 10 V		150	300	pА
R _{s⊢}	Shunt Resistance	$H = 0, V_{R} = 10 \text{ mV}$	1.0	6		GΩ
TC $R_{_{SH}}$	RSH Temp. Coefficient	$H = 0, V_{R} = 10 \text{ mV}$		-8		% / °C
C	Junction Capacitance	$H = 0, V_{R} = 0 V^{**}$		340		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λρ	Spectral Response - Peak	Spot Scan		950		nm
V _{BR}	Breakdown Voltage	l = 10 m A	30	50		V
N EP	Noise Equivalent Power	V _R = 10 mV @ Peak		5x10 ⁻¹⁴		W/ V Hz
tr	Response Time	$RL = 1 K\Omega V_{R} = 0 V$		450		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