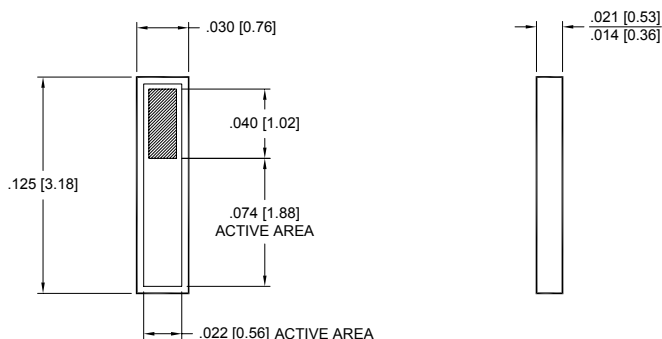


CHIP DIMENSIONS INCH [mm]



SOLDERABLE PHOTODIODE

## FEATURES

- Red enhanced
- Photovoltaic
- High quantum efficiency

## DESCRIPTION

The **PDB-V601-1** is a silicon red enhanced solderable photodiode designed for low noise and for photovoltaic applications.

## APPLICATIONS

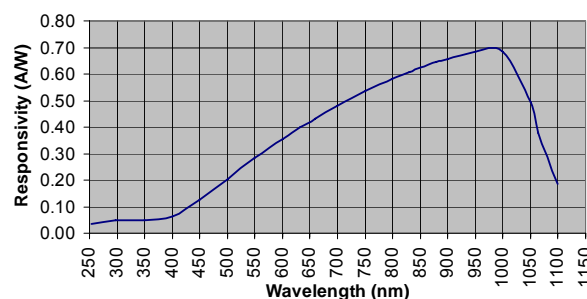
- Optical encoder
- Position sensor
- Industrial controls
- Instrumentation

## ABSOLUTE MAXIMUM RATING (TA = 23°C UNLESS OTHERWISE NOTED)

SYMBOL	PARAMETER	MIN	MAX	UNITS
V <sub>BR</sub>	Reverse Voltage		25	V
T <sub>STG</sub>	Storage Temperature	-40	+125	°C
T <sub>O</sub>	Operating Temperature	-40	+100	°C
T <sub>S</sub>	Soldering Temperature*		+224	°C

\* 1/16 inch from case for 3 seconds max.

## SPECTRAL RESPONSE



## ELECTRO-OPTICAL CHARACTERISTICS RATING (TA = 23°C UNLESS OTHERWISE NOTED)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>SC</sub>	Short Circuit Current	H = 100 fc, 2850 K	10	13		μA
I <sub>D</sub>	Dark Current	V <sub>R</sub> = 5 V		3	7	nA
R <sub>SH</sub>	Shunt Resistance	V <sub>R</sub> = 10 mV	100	250		MΩ
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> = 0 V, f = 1 MHz		250		pF
λ <sub>range</sub>	Spectral Application Range	Spot Scan	350		1100	nm
V <sub>BR</sub>	Breakdown Voltage	I = 10 μA	5	15		V
NEP	Noise Equivalent Power	V <sub>R</sub> = 0V @ λ = Peak		2x10 <sup>-14</sup>		W/√Hz
t <sub>r</sub>	Response Time	RL = 1KΩ, V <sub>R</sub> = 0 V		300		nS

\*\*Response time of 10% to 90% is specified at 660nm wavelength light.

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.