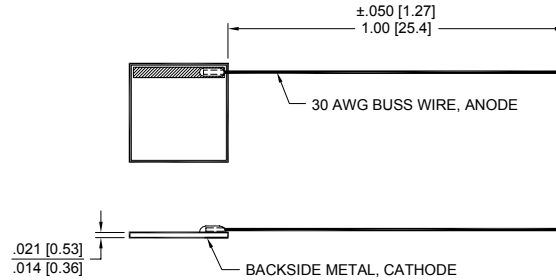
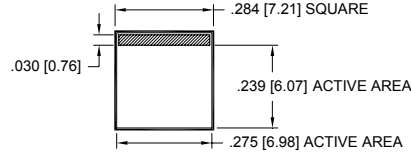




PACKAGE DIMENSIONS INCH [mm]



CHIP DIMENSIONS INCH [mm]



SOLDERABLE PHOTODIODE

FEATURES

- Red enhanced
- Photovoltaic
- High quantum efficiency

DESCRIPTION

The **PDB-V609-3** is a silicon, planar diffused, red enhanced solderable photodiode that comes in buss wire leads.

APPLICATIONS

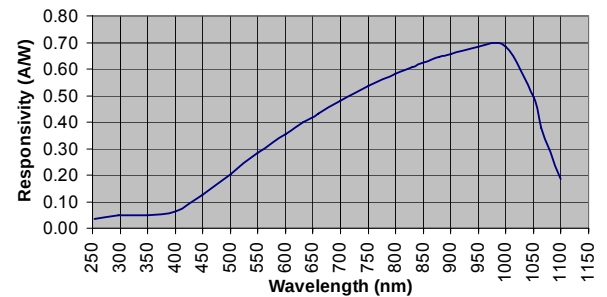
- Optical encoder
- Position sensor
- Industrial controls
- Instrumentation

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V_{BR}	Reverse Voltage		25	V
T_{STG}	Storage Temperature	-40	+125	°C
T_O	Operating Temperature	-40	+100	°C
T_S	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_{SC}	Short Circuit Current	$H = 100 \text{ fc}$, 2850 K	490	545		μA
I_D	Dark Current	$V_R = 5 \text{ V}$		50	100	nA
R_{SH}	Shunt Resistance	$V_R = 10 \text{ mV}$	5	15		$M\Omega$
C_J	Junction Capacitance	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$		5500		pF
λ_{range}	Spectral Application Range	Spot Scan	350		1100	nm
V_{BR}	Breakdown Voltage	$I = 10 \mu\text{A}$	5	15		V
NEP	Noise Equivalent Power	$V_R = 0 \text{ V}$ @ $\lambda = \text{Peak}$		1.2×10^{-13}		$\text{W}/\sqrt{\text{Hz}}$
t_r	Response Time	$R_L = 1 \text{ K}\Omega$, $V_R = 0 \text{ V}$		1500		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.