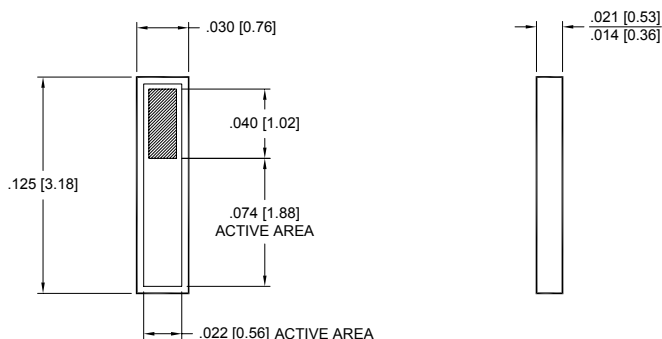


CHIP DIMENSIONS INCH [mm]



SOLDERABLE PHOTODIODE

FEATURES

- Red enhanced
- Photoconductive
- High quantum efficiency

DESCRIPTION

The **PDB-C601-1** is a silicon red enhanced solderable photodiode designed for low capacitance and high speed for photoconductive applications.

APPLICATIONS

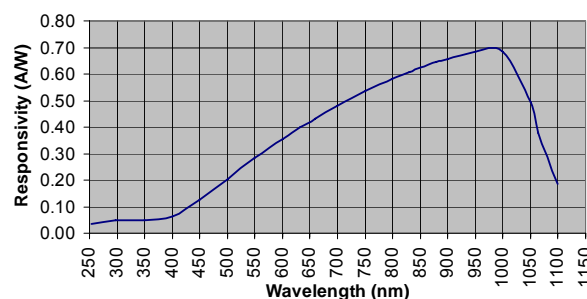
- Optical encoder
- Position sensor
- Industrial controls
- Instrumentation

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		75	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 fc, 2850 K	15	17		μA
I _D	Dark Current	V _R = 5 V		0.5	2	nA
R _{SH}	Shunt Resistance	V _R = 10 mV	60	150		MΩ
C _J	Junction Capacitance	V _R = 5 V, f = 1 MHz		10		pF
λ _{range}	Spectral Application Range	Spot Scan	350		1100	nm
V _{BR}	Breakdown Voltage	I = 10 μA	25	50		V
NEP	Noise Equivalent Power	V _R = 0V @ λ = Peak		1x10 ⁻¹⁴		W/√Hz
t _r	Response Time	RL = 1KΩ, V _R = 5V		10		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.