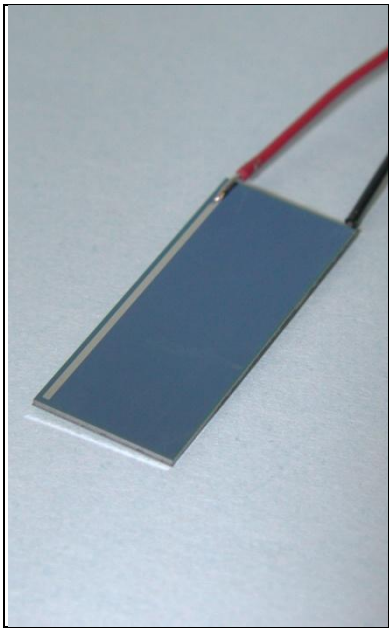
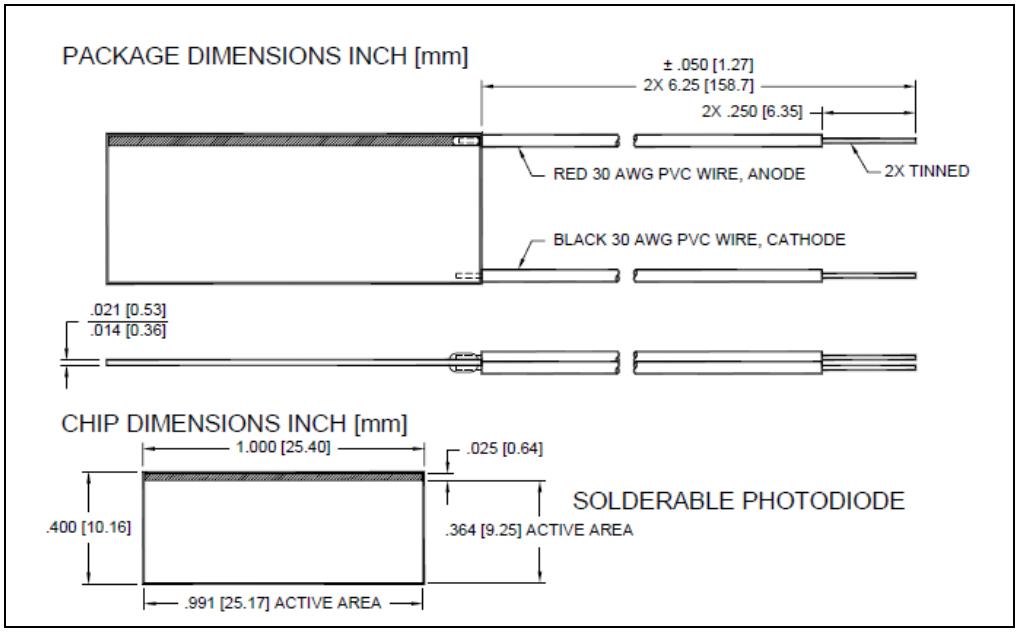
LUNA OPTOELECTRONICS

Solderable Silicon Photodiodes
PDB-V615-2

WWW.LUNAINC.COM **Precision – Control – Results**





DESCRIPTION

The **PDB-V615-2** is a silicon, planar diffused, red enhanced solderable photodiode that comes with PVC wire leads.

FEATURES

- Red Enhanced
- Photovoltaic
- High quantum efficiency

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Optical encoder
- Position sensor
- Instrumentation
- Industrial controls

RoHS

ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN		MAX	UNITS	
Reverse Voltage	-	-	25	V	T_a = 23°C UNLESS OTHERWISE NOTED
Storage Temperature	-40	-	125	°C	-
Operating Temperature	-40	to	+100	°C	-
Soldering Temperature*	-	-	+224	°C	-

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

REV 01-04-16

Luna Optoelectronics, 1240 Avenida Acaso, Camarillo CA 93012 • Phone (805) 987-0146 • Fax (805) 484-9935

OPTO-ELECTRICAL PARAMETERS

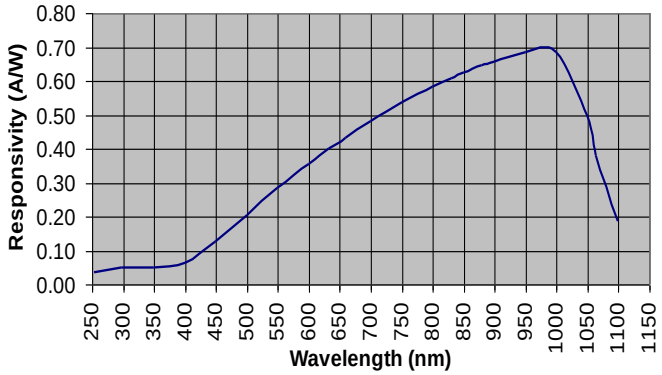
T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Short Circuit Current	H= 100 fc, 2850 K	2.5	2.8	-	mA
Dark Current	V_R = 5 V	-	350	700	nA
Shunt Resistance	V_R = 10 mV	0.2	0.5	-	mΩ
Junction Capacitance	V_R =0V; f = 1 MHz	-	25800	-	pF
Spectral Application Range	Spot Scan	350	-	1100	nm
Breakdown Voltage	I=10 µA	5	15	-	V
Noise Equivalent Power	V_R =0V@λ= Peak	-	$5.0x10^{-13}$	-	$W/\sqrt{Hz}$
Response Time**	RL = 1KΩ,V_R = 0 V	-	7000	-	nS

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE



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