



DESCRIPTION

The **PDB-V617-2** is a silicon red enhanced solderable photodiode designed for low noise and for photovoltaic applications.

FEATURES

- Red enhanced
- Photovoltaic
- High quantum efficiency

RELIABILITY

Contact Luna Optoelectronics for recommendations on specific test conditions and procedures.

APPLICATIONS

- Optical encoder
- Position sensor
- Industrial controls
- Instrumentation



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.

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	615	640	-	μA
Dark Current	V _R =5 V	-	35	75	nA
Shunt Resistance	V _R = 10 mV	6.5	13.5	-	MΩ
Junction Capacitance	V _R =0V; f = 1 MHz	-	8500	-	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	-	2.2x10 ⁻¹³	-	W/√Hz
Response Time**	RL = 1KΩ, V _R = 0 V	-	2500	-	nS

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

