



DESCRIPTION

The **PDB-V609-3** is a silicon, planar diffused, red enhanced solderable photodiode that comes in buss 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
- Industrial controls
- Instrumentation

ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN		MAX	UNITS	
Reverse Voltage	-	-	25	V	$T_a = 23^\circ\text{C}$ UNLESS OTHERWISE NOTED
Storage Temperature	-40	-	125	$^\circ\text{C}$	-
Operating Temperature	-40	to	+100	$^\circ\text{C}$	-
Soldering Temperature*	-	-	+224	$^\circ\text{C}$	-

* 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	490	545	-	μA
Dark Current	V _R = 5V	-	50	100	nA
Shunt Resistance	V _R = 10 mV	5	15	-	MΩ
Junction Capacitance	V _R =0V; f = 1 MHz	-	5500	-	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	-	1.2x10 ⁻¹³	-	W/√Hz
Response Time**	RL = 1KΩ, V _R = 0 V	-	1500	-	nS

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

