



DESCRIPTION

The **PDB-C615-2** is a silicon red enhanced solderable photodiode designed for low capacitance and high speed for photoconductive applications.

FEATURES

- Red Enhanced
- Photoconductive
- 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	-	75	V	T _a = 23°C unless otherwise noted
Storage Temperature	-40	125	°C	-
Operating Temperature	-40	+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	2.5	2.8	-	mA
Dark Current	V _R = 5 V	-	350	700	nA
Shunt Resistance	V _R = 10 mV	0.1	0.25	-	MΩ
Junction Capacitance	V _R =5V; f = 1 MHz	-	775	-	pF
Spectral Application Range	Spot Scan	350	-	1100	nm
Breakdown Voltage	I=10 μA	25	50	-	V
Noise Equivalent Power	V _R =0V@λ= Peak	-	3x10 ⁻¹²	-	W/√Hz
Response Time**	RL = 1KΩ, V _R = 5V	-	150	-	nS

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

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

