



DESCRIPTION

The **PDB-C612-2** 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 encoders
- Position Sensors
- 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	to +100	°C	-
Soldering Temperature*	-	+260	°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	500	680	-	μA
Dark Current	V _R = 5V	-	1	50	nA
Shunt Resistance	V _R = 10 mV	5	100	-	MΩ
Junction Capacitance	V _R =5V; f = 1 MHz	-	300	-	pF
Spectral Application Range	Spot Scan	350	-	1100	Nm
Breakdown Voltage	I=10 μA	10	50	-	V
Noise Equivalent Power	V _R =0V@λ= Peak	-	2x10 ⁻¹⁴	-5x10 ⁻¹³	WHz ^{1/2}
Response Time	RL = 1KΩ, V _R = 5 V	-	45	-	nS

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

