

### FEATURES

- Red enhanced
- Photoconductive
- High quantum efficiency

### DESCRIPTION

The **PDB-C609-2** is a silicon red enhanced solderable photodiode designed for low capacitance and high speed for photoconductive applications.

### APPLICATIONS

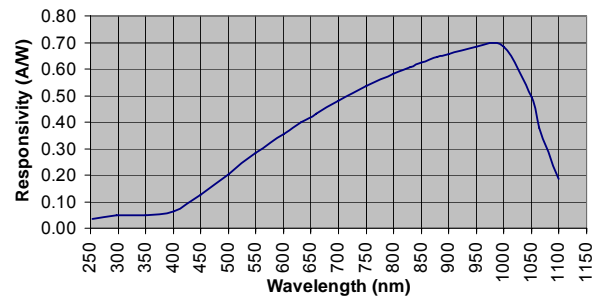
- Optical encoder
- Position sensor
- Industrial controls
- Instrumentation

### ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	MAX	UNITS
V <sub>BR</sub>	Reverse Voltage		75	V
T <sub>STG</sub>	Storage Temperature	-40	+125	°C
T <sub>O</sub>	Operating Temperature	-40	+100	°C
T <sub>S</sub>	Soldering Temperature*		+224	°C

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

### SPECTRAL RESPONSE



### ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>SC</sub>	Short Circuit Current	H = 100 fc, 2850 K	490	545		μA
I <sub>D</sub>	Dark Current	V <sub>R</sub> = 5 V		30	75	nA
R <sub>SH</sub>	Shunt Resistance	V <sub>R</sub> = 10 mV	3	10		MΩ
C <sub>J</sub>	Junction Capacitance	V <sub>R</sub> = 5 V, f = 1 MHz		240		pF
λ range	Spectral Application Range	Spot Scan	350		1100	nm
V <sub>BR</sub>	Breakdown Voltage	I = 10 μA	25	50		V
NEP	Noise Equivalent Power	V <sub>R</sub> = 0V @ λ = Peak		4x10 <sup>-13</sup>		W/√Hz
t <sub>r</sub>	Response Time	RL = 1KΩ, V <sub>R</sub> = 5V		30		nS

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

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.