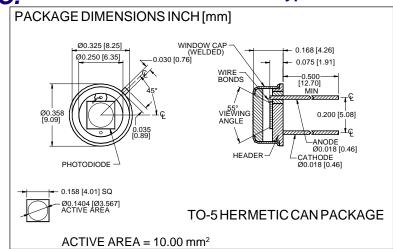
PHOTONIC DETECTORS INC.

Silicon Photodiode, Blue Enhanced Photovoltaic Type PDB-V106





FEATURES

- Low noise
- Blue enhanced
- High shunt resistance
- High response

DESCRIPTION

The **PDB-V106** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for low noise photovoltaic applications. Packaged in a hermetic TO-5 metal can with a flat window.

APPLICATIONS

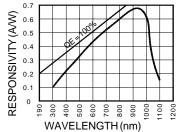
- Instrumentation
- Industrial controls
- Laser detection
- Flame detection

ABSOLUTE MAXIMUM RATING (TA=25°C unless otherwise noted)

SYMBOL	PARAMETER	MIN	MAX	UNITS	
V _{BR}	Reverse Voltage		75	V	
T _{STG}	Storage Temperature	-55	+150	∘C	
То	Operating Temperature Range	-40	+125	∘C	
Ts	Soldering Temperature*		+240	∘C	
IL	Light Current		0.5	mA	

^{*1/16} inch from case for 3 secs max

SPECTRAL RESPONSE



ELECTRO-OPTICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	CHARACTERISTIC	TESTCONDITIONS	MIN	TYP	MAX	UNITS
Isc	Short Circuit Current	H = 100 fc, 2850 K	100	125		μ A
ΙD	Dark Current	H = 0, V _R = 10 V		300	500	pA
Rsн	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$.2	2		GΩ
TC Rsh	RSH Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/℃
Сı	Junction Capacitance	H = 0, V _R = 0 V**		1200		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λр	Spectral Response - Peak	Spot Scan		950		nm
V _{BR}	Breakdown Voltage	I = 10 μA	30	50		V
NEP	Noise Equivalent Power	V _R = 10 mV @ Peak		1.0x10 ⁻¹⁴		W/ √Hz
tr	Response Time	$RL = 1 K\Omega V_R = 0 V$		800		nS