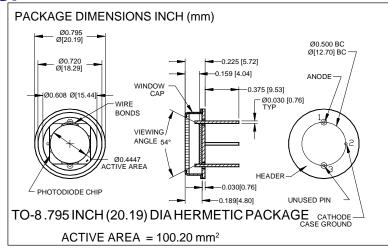
PHOTONIC Silicon Photodiode, Blue Enhanced Photoconductive **DETECTORS INC.** Type PDB-C111





FEATURES

- High speed
- Low capacitance
- Blue enhanced
- Low dark current

DESCRIPTION

The **PDB-C111** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic jumbo TO-8 metal can with a flat window.

APPLICATIONS

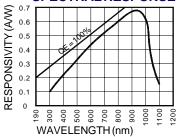
- Instrumentation
- Power meters
- Colorimeters
- Laser power meters

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		100	V
T _{STG}	Storage Temperature	-55	+150	∘C
To	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	1.0	1.3		mA
ΙD	Dark Current	H = 0, V _R = 10 V		10	30	nA
Rsh	Shunt Resistance	H = 0, V _R = 10 mV	15	30		МΩ
TC Rsh	Rsн Temp. Coefficient	H = 0, V _R = 10 mV		-8		%/℃
Сл	Junction Capacitance	H = 0, V _R = 10 V**		300		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λр	Spectral Response - Peak	Spot Scan		950		nm
VBR	Breakdown Voltage	I = 10 μA	30	50		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		3x10 ⁻¹³		W/ √ Hz
tr	Response Time	$RL = 1 K\Omega V_R = 50 V$		25		nS

Information in this technical data sheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice. **f = 1 MHz [FORM NO. 100-PDB-C111 REV B]