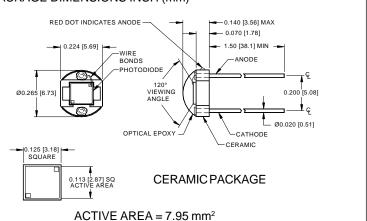
PHOTONIC Silicon Photodiode, Blue Enhanced Photoconductive DETECTORS INC. Type PDB-C113



PACKAGE DIMENSIONS INCH (mm)



FEATURES

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

DESCRIPTION

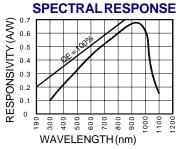
The **PDB-C113** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged on a two lead ceramic substrate with a clear epoxy glob top.

APPLICATIONS

- Smoke detector
- Bar code sensor
- Security sensor
- Camera meter

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

				,	
SYMBOL	PARAMETER	MIN	MAX	UNITS	
Vbr	Reverse Voltage		100	V	
T _{stg}	Storage Temperature	-40	+100	°C	
То	Operating Temperature Range	-40	+90	°C	
Ts	Soldering Temperature*		+240	°C	
I	Light Current		0.5	mA	
	3				



*1/16 inch from case for 3 secs max

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

SYMBOL	CHARACTERISTIC	TESTCONDITIONS	MIN	TYP	MAX	UNITS
lsc	Short Circuit Current	H = 100 fc, 2850 K	90	110		μΑ
ΙD	Dark Current	$H = 0, V_R = 10 V$		5	30	nA
Rsн	Shunt Resistance	H = 0, V _R = 10 mV	100	250		MΩ
TC Rsh	RsH Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/°C
CJ	Junction Capacitance	$H = 0, V_R = 10 V^{**}$		60		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λρ	Spectral Response - Peak	Spot Scan		950		nm
Vbr	Breakdown Voltage	I = 10 μA	75	100		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		9.0x10 ⁻¹⁴		W/ √ Hz
tr	Response Time	$RL = 1 K\Omega V_R = 50 V$		16		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-C113 REV B]