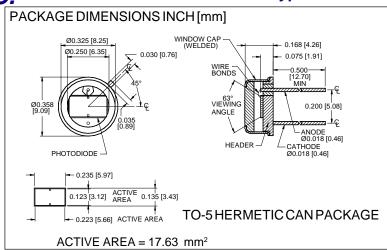
### **PHOTONIC** Silicon Photodiode, Blue Enhanced Photoconductive DETECTORS INC. Type PDB-C114





### **FEATURES**

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

#### DESCRIPTION

The PDB-C114 is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. • Laser detection Packaged in a hermetic TO-5 metal can with a flat window.

#### **APPLICATIONS**

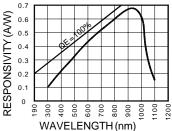
- Instrumentation
- Industrial controls
- Optical power meters

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V <sub>BR</sub>	Reverse Voltage		100	V
T <sub>STG</sub>	Storage Temperature	-55	+150	∘C
То	Operating Temperature Range	-40	+125	∘C
Ts	Soldering Temperature*		+240	∘C
IL	Light Current		0.5	mA

<sup>\*1/16</sup> inch from case for 3 secs max

# **SPECTRAL RESPONSE**



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

(1725 ° anicos anomos nata)								
SYMBOL	CHARACTERISTIC	TESTCONDITIONS	MIN	TYP	MAX	UNITS		
Isc	Short Circuit Current	H = 100 fc, 2850 K	190	235		μ Α		
ΙD	Dark Current	H = 0, V <sub>R</sub> = 10 V		3	8.0	nA		
Rsн	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$	150	500		МΩ		
TC Rsh	RSH Temp. Coefficient	H = 0, V <sub>R</sub> = 10 mV		-8		%/℃		
Сл	Junction Capacitance	H = 0, V <sub>R</sub> = 10 V**		50		pF		
λrange	Spectral Application Range	Spot Scan	350		1100	nm		
λр	Spectral Response - Peak	Spot Scan		950		nm		
V <sub>BR</sub>	Breakdown Voltage	I = 10 μA	100	125		V		
NEP	Noise Equivalent Power	V <sub>R</sub> = 10 V @ Peak		5.0x10 <sup>-14</sup>		W/ √Hz		
tr	Response Time	$RL = 1 K\Omega V_p = 50 V$		20		nS		