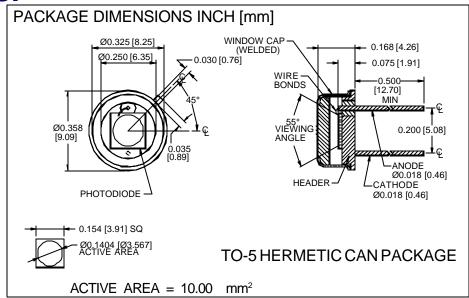
PHOTONIC Silicon Photodiode, Blue Enhanced Photoconductive DETECTORS INC. Type PDB-C106





FEATURES

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

DESCRIPTION

The PDB-C106 is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic TO-5 metal can with a flat window.

APPLICATIONS

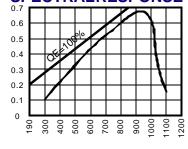
- Instrumentation
- Analytical measurements
- Laser sensor
- Industrial sensor

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

SYMBOL	PARAMETER	MIN	MAX	UNITS	
VBR	Reverse Voltage		100	V	
T _{STG}	Storage Temperature	-55	+150	⊙C	
То	Operating Temperature Range	-40	+125	∘C	
Ts	Soldering Temperature*		+240	∘C	
I _L	Light Current		500	mA	

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

SPECTRALRESPONSE RESPONSIVITY (A/W)



WAVELENGTH(nm)

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Isc	Short Circuit Current	H = 100 fc, 2850 K	100	130		μΑ
ΙD	Dark Current	$H = 0, V_R = 10 V$		2	10	nA
RsH	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$	200	650		МΩ
TC Rsh	RSH Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/℃
Cı	Junction Capacitance	H = 0, V _R = 10 V**		70		рF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λр	Spectral Response - Peak	Spot Scan		950		nm
VBR	Breakdown Voltage	Ι = 10 μΑ	75	100		V
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		3x10 ⁻¹⁴		W/ √ Hz
tr	Response Time	$RL = 1 K\Omega V_R = 50 V$		18		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-C106 REV C]