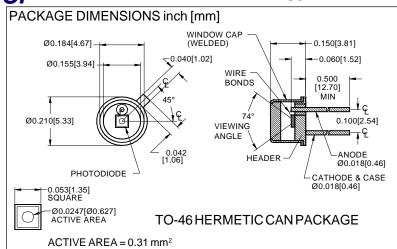
PHOTONIC Silicon Photodiode, Blue Enhanced Photoconductive DETECTORS INC. Type PDB-C101





FEATURES

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

DESCRIPTION

The **PDB-C101** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic TO-46 metal can with a flat window.

APPLICATIONS

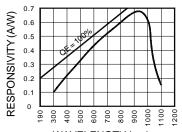
- Instrumentation
- Industrial controls
- Laser detection
- Particle detection

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
T _o	Operating Temperature Range	-40	+125	∘C
T _s	Soldering Temperature*		+240	∘C
IL	Light Current		0.5	mA

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

SPECTRAL RESPONSE



WAVELENGTH (nm)

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

LELOTINO-OF FIGAL OFFICE (TA-23 C unless otherwise noted)									
SYMBOL	CHARACTERISTIC	TESTCONDITIONS	MIN	TYP	MAX	UNITS			
l _{sc}	Short Circuit Current	H = 100 fc, 2850 K	3.2	4.6		μ A			
I _D	Dark Current	$H = 0, V_R = 10 V$		40	150	pA			
R _{SH}	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$.50	5		GΩ			
TCR _{SH}	RSH Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/℃			
C _J	Junction Capacitance	$H = 0$, $V_R = 10 V^{**}$		15		pF			
λ range	Spectral Application Range	Spot Scan	350		1100	nm			
λр	Spectral Response - Peak	Spot Scan		950		nm			
V _{BR}	Breakdown Voltage	I = 10 μA	100	125		V			
NEP	Noise Equivalent Power	V _R = 10 V @ Peak		1.5x10 ⁻¹⁴		W/√ Hz			
tr	Response Time	$RL = 1 K\Omega V_{p} = 50 V$		10		nS			