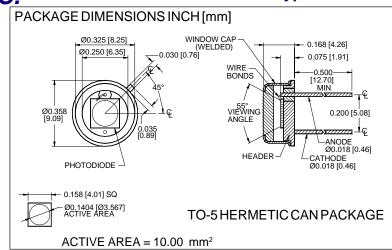
PHOTONIC Silicon Photodiode, Blue Enhanced Photoconductive DETECTORS INC. Type PDB-C106





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

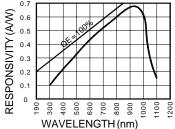
- Instrumentation
- Analytical measurements
- Laser sensor
- Industrial sensor

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

SYMBOL	PARAMETER	MIN	MAX	UNITS
V _{BR}	Reverse Voltage		100	V
T _{STG}	Storage Temperature	-55	+150	∘C
То	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	100	130		μ A
ΙD	Dark Current	H = 0, V _R = 10 V		2	10	nA
Rsн	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		%/℃
Сл	Junction Capacitance	H = 0, V _R = 10 V**		70		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λр	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		3x10 ⁻¹⁴		W/ √ Hz
tr	Response Time	RI = 1 KQ V = 50 V		18		nS