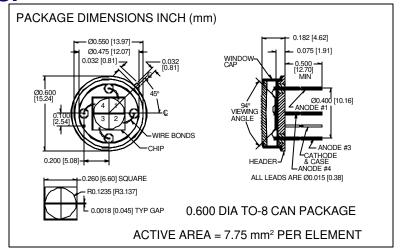
PHOTONIC Silicon Photodiode, Blue Enhanced Photoconductive **Quadrant Type PDB-C204** DETECTORS INC.





FEATURES

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

DESCRIPTION

The PDB-C204 is a silicon, pin planar diffused, blue enhanced quadrant cell photodiode. Ideal for high speed photoconductive applications. Packaged in a 0.600 dia TO-8 metal can with a flat

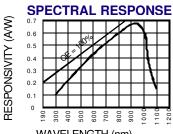
APPLICATIONS

- Optical Alignment
- Position sensing
- Edge sensing
- Instrumentation

window cap. **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
To	Operating Temperature Range	-40	+125	°C
Ts	Soldering Temperature*		+240	°C
I	Light Current		0.5	mA

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



WAVELENGTH (nm)

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
lsc	Short Circuit Current	H = 100 fc, 2850 K	100	125		m A
ΙD	Dark Current	H = 0, V _R = 10 V		2.5	5	nA
Rsh	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$	150	200		MΩ
TC Rsh	Rsн Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		%/°C
Cı	Junction Capacitance	H = 0, V _R = 10 V		40		pF
λrange	Spectral Application Range	Spot Scan	320		1100	nm
λр	Spectral Response - Peak	Spot Scan		950		nm
VBR	Breakdown Voltage	I = 10 m A	50	100		V
N EP	Noise Equivalent Power	V _R = 10 V @ Peak		.75x10 ⁻¹⁴		W/ √ Hz
tr	Response Time	RL = 1 KΩ V _R = 10 V		5	15	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.