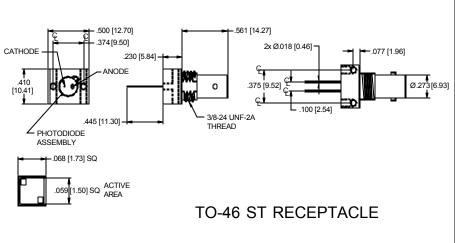
PHOTONIC Silicon Photodiode, Blue Enhanced Photoconductive DETECTORS INC. Hermetic Fiber Optic Detector Type PDB-C503-ST



PACKAGE DIMENSIONS INCH [mm]



ACTIVE AREA = 2.03 mm²

FEATURES

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

DESCRIPTION

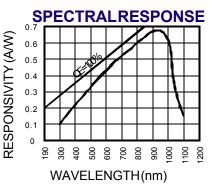
The **PDB-C503-ST** is a silicon, PIN planar diffused, blue enhanced photodiode. Ideal for high speed photoconductive applications. Packaged in a hermetic, TO-46 ST receptacle.

APPLICATIONSIndustrial controls

- Video systems
- Laser power monitors
- Fiber optic links

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
Τ _s	Soldering Temperature*		+240	°C
Ι	Light Current		500	mA



*1/16 inch from case for 3 secs max

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

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
l _{sc}	Short Circuit Current	H = 100 fc, 2850 K	20	25		μ A
I _D	Dark Current	H = 0, V _R = 10 V		65	250	pА
R _{SH}	Shunt Resistance	H = 0, V _R = 10 mV	0.5	2		GΩ
TCR _{SH}	RSH Temp. Coefficient	H = 0, V _R = 10 mV		-8		% / °C
CJ	Junction Capacitance	H = 0, V _R = 10 V**		7		pF
λrange	Spectral Application Range	Spot Scan	350		1100	nm
λρ	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		1.0x10 ⁻¹⁴		W/ √ Hz
tr	Response Time	RL = 1 K Ω V _R = 50 V		5		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=1MHz [FORM NO. 100-PDB-C503-ST REV A]