

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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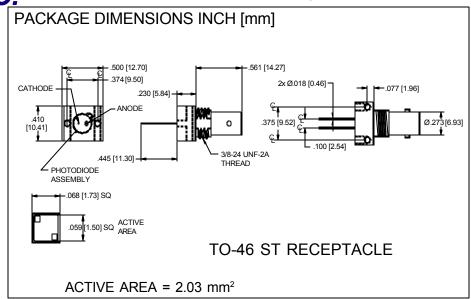






PHOTONIC Silicon Photodiode, Blue Enhanced Photoconductive **DETECTORS INC.** Hermetic Fiber Optic Detector Type PDB-C503-ST





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.

APPLICATIONS

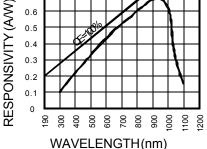
- Industrial controls
- Video systems
- Laser power monitors
- Fiber optic links

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

SYMBOL	PARAMETER	MIN	MAX	UNITS	
V _{ER}	Reverse Voltage		100	V	
T_{STG}	Storage Temperature	-55	+150	∞	
T _O	Operating Temperature Range	-40	+125	∞	
T _s	Soldering Temperature*		+240	∞	
IL	Light Current		500	mA	

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

SPECTRALRESPONSE 0.6 0.5



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

(177 20 Carried Carried Total)									
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	pA			
R _{SH}	Shunt Resistance	$H = 0, V_R = 10 \text{ mV}$	0.5	2		GΩ			
TCR _{SH}	RSH Temp. Coefficient	$H = 0, V_R = 10 \text{ mV}$		-8		% / ℃			
C _J	Junction Capacitance	H = 0, V _R = 10 V**		7		рF			
λrange	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		1.0x10 ⁻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 [FORM NO. 100-PDB-C503-ST REV A] are subject to change without notice. ** f = 1 MHz