



PT511B

TECHNICAL DATA

TO-Can PIN Photodiode

Ball Lens

PT511B is an InGaAs pin structure based photodiode on InP by MOCVD method and planar diffusing technology. The sensitive area is $\varnothing 300\mu\text{m}$ respectively. TO-46 package with ball lens.



Absolute Maximum Ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	-10	V
Optical Current	I_{OP}	10	mA
Forward Current	I_F	10	mA
Power Dissipation	P_D	50	mW
Operating Temperature	T_{opr}	-40 ... +80	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ... +80	$^\circ\text{C}$
Soldering Temperature (max. 10 s)	T_{sol}	260	$^\circ\text{C}$

Specifications ($T_a=25^\circ\text{C}$)

Item	Value	Unit
Sensitive Area	$\varnothing 300$	μm
Spectral Response Range	900 .. 1650	nm
Responsivity (0 V)	$\lambda=1310 \text{ nm}$	≥ 0.80
	$\lambda=1550 \text{ nm}$	≥ 0.85
Linear Range (0 V)	-	-70 .. +10
Capacitance (-5 V)	≤ 20	pF
Dark Current (-5 V)	≤ 5	nA
Operating Voltage	0 .. -5	V
Linearity	± 0.2	dB



Outline Dimensions

TO-46 (ball lens):

