



## 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 $\mu$ m respectively. TO-46 package with ball lens.



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

Parameter	Symbol	Value	Unit
Reverse Voltage	$U_R$	1000	V
Reverse current	$I_R$	500	$\mu\text{A}$
Forward current	$I_F$	1000	mA
Power Dissipation	$P_D$	100	mW
Operating Temperature	$T_{opr}$	-40 ... +85	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 ... +125	$^\circ\text{C}$
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	$\mu\text{m}$
Spectral Response Range	Normal	1000 .. 1650	Nm
	Broad	650 .. 1650	Nm
Responsivity (0 V)	$\lambda=850$ nm	$\geq 0.20$	A/W
	$\lambda=1310$ nm	$\geq 0.75$	A/W
	$\lambda=1550$ nm	$\geq 0.80$	A/W
Linear Range (0 V)	-	-70 .. +10	dBm
	-	-55 .. +25	dBm
	-	-40 .. +30	dBm
Capacitance (-5 V)		$\leq 12$	pF
Dark Current (-5 V)		$\leq 5$	nA
Operating Voltage		0 .. -10	V
Linearity		-	dB
Splicing Deviation		$\pm 0.1$	Db
Splicing Life		$10^5$	Time
Highest Unsaturated Power		-	dBm



## Outline Dimensions

### TO-46 (ball lens):

