

**PRELIMINARY**

Rev. A1

IPD1450-038-5T

- InGaAs Photodiode
- Spectral Responsivity: 1000 – 1600 nm
- Chip: InGaAs, 380 x 380 μm , 1 pc.
- TO-18 package, flat glass window
- Viewing Angle: 58°

Description



IPD14-12-5T-2 is a InGaAs photodiode with a sensitivity range of **1000 – 1600 nm**.

The 380 x 380 μm chip die is disposed inside a TO-18 package and covered by a gold plated cap and glass window.

Maximum Ratings $(T_{\text{CASE}}=25^{\circ}\text{C})$

Parameter	Symbol	Values		Unit
		Min.	Max.	
Reverse Breakdown Voltage	V_R		20	V
Operating Temperature	T_{CASE}	- 40	+ 100	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	- 40	+ 100	$^{\circ}\text{C}$
Lead Solder Temperature *	T_{SLD}		+ 250	$^{\circ}\text{C}$

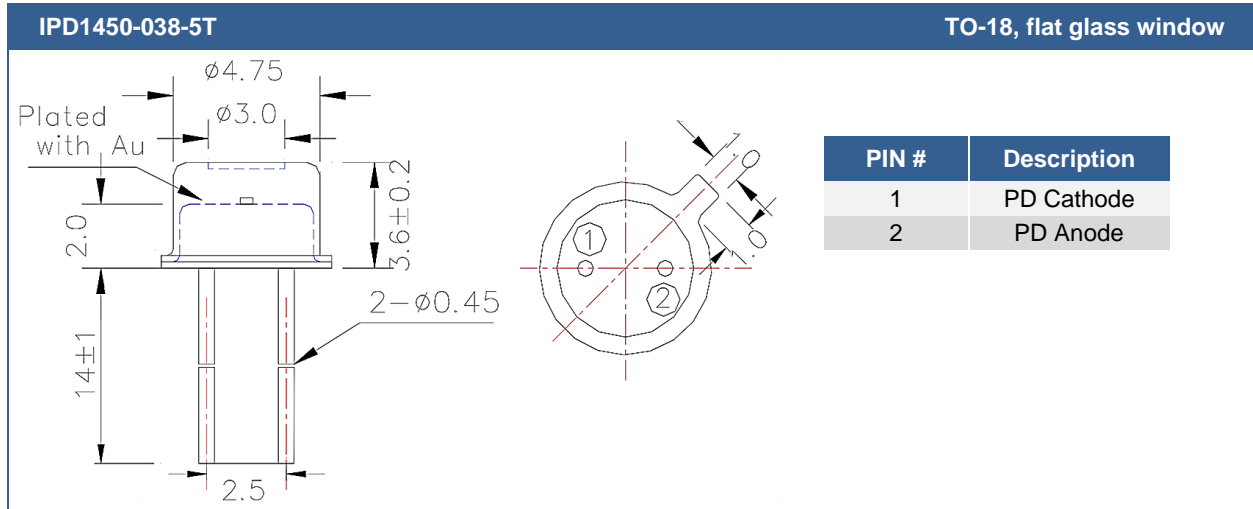
* must be completed within 5 seconds, and is allowed in the area apart 3 mm from the bottom of the diode

Electro-Optical Characteristics $(T_{\text{CASE}}=25^{\circ}\text{C})$

Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Spectral Responsivity (Peak)	λ_P	$V_R=0\text{V}$		1450		nm
Photo Responsivity	R_E	$V_R=0\text{V}, \lambda_P=1300\text{nm}$		0.95		A/W
		$V_R=0\text{V}, \lambda_P=1550\text{nm}$		1.00		
Photo Current	I_L	$V_R=0\text{V}, \lambda_P=1450\text{nm}$		20		μA
Dark Current	I_D	$V_R=5\text{V}$			1	nA
Viewing Angle	$2\theta_{1/2}$	$V_R=0\text{V}$		58		deg.
Total Capacitance	C_T	$V_R=5\text{V}, f=1\text{MHz}$		4.5		pF



Outline Dimensions



All Dimensions in mm



Revisions History

Rel.	Rel. Date	Chapter	Modification	Page
A1	2018-03-01	-	Initial release	-

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The above specifications are for reference purpose only and subjected to change without prior notice