

1300 / 1550  
nm

PD-1375-ir

### Description:

**PD-1375-ir** – is a series of photodetector modules for spectral range of 1300/1550nm based on InGaAs PIN photodiode. Hermetically sealed modules are performed in standard receptacle package with built-in collimating ball lens and are used for coupling with «FC/PC» connectorized single- or multimode optical fiber. The modules operate in wide temperature range, have high spectral responsivity and low dark current.

**PD-1375-ir** – are the best photodetectors for digital (up to 622Mb/s) fiber-optic communication lines, optical testers, systems of optical synchronization and other applications.



### Optical and electrical characteristics (T=25°C):

Characteristics	Symbol	Test condition	Min	Typ.	Max	Units
<b>PIN photodiode</b>						
Diameter of photosensitive area	D			120		μm
Spectral range of maximum responsivity	$\lambda_{OP}$		1100		1650	nm
Responsivity	R	$U_{REV}=5.0V, \lambda=1300nm$	0.8	0.9		A/W
Dark current	$I_D$	$U_{REV}=5.0 V$		1.0	2.0	nA
Capacity	$C_{PD}$	$U_{REV}=5.0 V, f=1 MHz$		1.5	1.7	pF
Rise time/fall time	$\tau_R/\tau_F$	$P_{OP}=5.0 V$		0.3	0.5	ns
<b>Optical fiber</b>						
Optical connector type				«FC»		
Optical fiber type				SM,MM		

### Absolute maximum ratings:

<b>PIN photodiode</b>						
Max. reverse bias	$U_R$			5.0		V
Max. forward current	$I_F$			2.0		mA
Max. reverse current	$I_R$			1.0		mA
<b>Environment</b>						
Operating temperature range	$T_{OP}$			-40..+55		°C
Storage temperature range	$T_{STR}$			-40..+70		°C
Pin soldering temperature				200		°C
Pin soldering time				3.0		sec

**ROITHNER LASERTECHNIK**

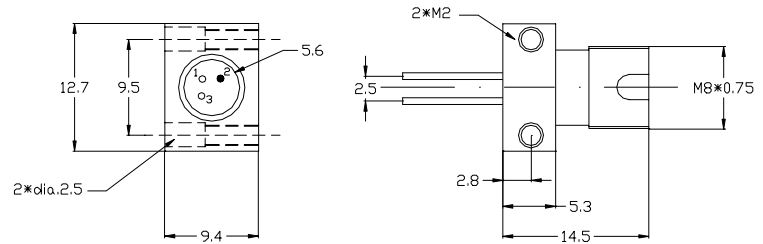
A-1040 VIENNA, SCHOENBRUNNER STRASSE 7, AUSTRIA

TEL: +43 -1- 586 52 43-0 FAX: +43 -1- 586 52 43-44

e-mail: [office@roithner-laser.com](mailto:office@roithner-laser.com) <http://www.roithner-laser.com>

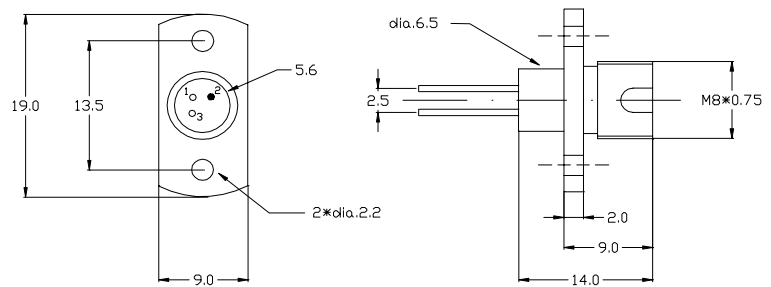
## Package specifications (type «A»):

Pin	Function
1	PD cathode (+)
2	case
3	PD anode (-)



## Package specifications (type «B»):

Pin	Function
1	PD cathode (+)
2	case
3	PD anode (-)



**ROITHNER LASERTECHNIK**

A-1040 VIENNA, SCHOENBRUNNER STRASSE 7, AUSTRIA

TEL: +43 -1- 586 52 43-0 FAX: +43 -1- 586 52 43-44

e-mail: [office@roithner-laser.com](mailto:office@roithner-laser.com) <http://www.roithner-laser.com>