

Lead ( Pb ) Free Product – RoHS Compliant

# PD015F32 hermetical sealing type photo-diode

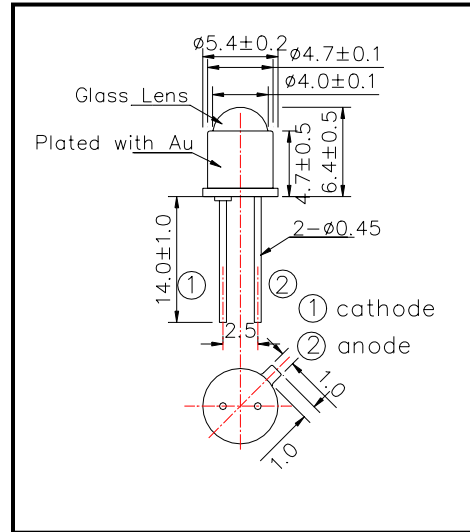
PD015F32 is a PIN-photodiode featuring excellent responsibility and high photocurrent. This PIN-photodiode consists of a large chip with 1.3x1.3mm active area mounted on the TO-46 stem and is hermetical sealed by metal can with ball lens.

These devices are designed to be easy of setting up optically with an angle of half sensitivity of  $\pm 15^\circ$

### ◆ Specifications

- |                 |                             |
|-----------------|-----------------------------|
| 1) Product Name | Metal Stem Type Photo-Diode |
| 2) Type No.     | PD015F32                    |
| 3) Chip         |                             |
| (1) Chip Size   | 1.5mmx1.5mm                 |
| (2) Active Area | 1.3mmx1.3mm                 |
| 4) Package      |                             |
| (1) Type        | TO-46                       |
| (2) Lens        | Glass Ball Lens             |
| (3) Cap         | Gold Plated                 |

### ◆ Outer dimension (Unit: mm)



### ◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Reverse Breakdown Voltage	V (BR) R	170	V
Operating Temperature	T <sub>OPR</sub>	-25 ~ +100	°C
Storage Temperature	T <sub>STG</sub>	-30 ~ +125	°C
Soldering Temperature	T <sub>SOL</sub>	240	°C

‡Soldering condition: Soldering condition must be completed within 2 seconds at 240°C

### ◆ Electro-Optical Characteristics [Ta=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	unit
Reverse Photo Current	I <sub>L</sub>	V <sub>R</sub> =10V, L=1000Lx		40		uA
Reverse Dark Current	I <sub>D</sub>	V <sub>R</sub> =10V			10	nA
Open Circuit Voltage	V <sub>OC</sub>	V <sub>R</sub> =10V, L=1000Lx		410		mV
Spectral Responsivity (Peak)	λ <sub>P</sub>			900		nm
Half Angle of Sensitivity	θ <sub>1/2</sub>			±15		deg.
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> =10V, f=1MHz		6		pF
Rise/Fall Time(10% ~ 90%)	t <sub>r</sub>	R <sub>L</sub> =1KΩ, V <sub>R</sub> =10V		10		ns
	t <sub>f</sub>			10		ns