

## PD018D32 hermetical sealing type photo-diode

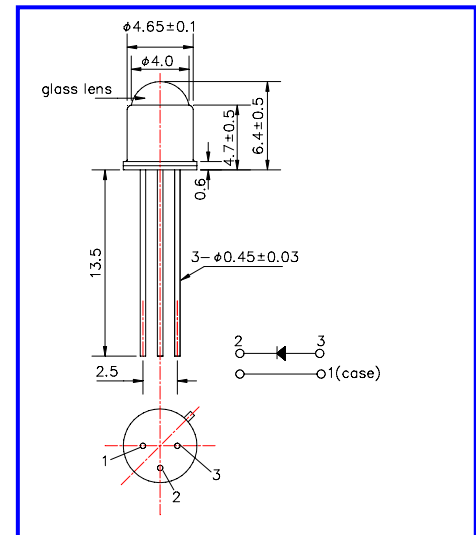
PD018D32 is a PIN-photodiode featuring excellent responsibility and high photocurrent. This PIN-photodiode consists of a large chip with 1.6×1.6mm active area mounted on the TO-18 (3pins) stem and is hermetical sealed by metal can with ball lens. These devices are designed to be easy of setting up optically with a wide angle of half sensitivity of ±15degrees.

mm)

### ◆Specifications

- 1)Product Name Hermetical Sealing Type Photo-Diode
- 2)Type No. PD018D32
- 3)Chip
  - (1)Chip Size 1.8mm×1.8mm
  - (2)Active Area 1.6mm×1.6mm
- 4)Package
  - (1)Type TO-18
  - (2)Lens Glass Spherical Ball Lens
  - (3)Cap Gold Plated

### ◆Outer dimension ( Unit :



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

Item	Symbol	Maximum Rated Value	Unit
Reverse Breakdown	V <sub>(BR)R</sub>	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		50		μA
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			±15		deg.
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> =10V, f=1MHz		18		pF
Rise/Fall Time (10% ~ 90%)	t <sub>r</sub>	R <sub>L</sub> =1KΩ, V <sub>R</sub> =10V		30		ns
	t <sub>f</sub>			30		ns