



# PT410

## TECHNICAL DATA

### TO-Can PIN Photodiode

### Flat Window

PT410 is an InGaAs pin structure based photodiode on InP by MOCVD method and planar diffusing technology. The sensitive area is Ø 75µm respectively. TO-46 package with flat window.



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

| Parameter                         | Symbol    | Value       | Unit             |
|-----------------------------------|-----------|-------------|------------------|
| Reverse Voltage                   | $V_R$     | -10         | V                |
| Optical Current                   | $I_{OP}$  | 10          | mA               |
| Forward Current                   | $I_F$     | 10          | mA               |
| Power Dissipation                 | $P_D$     | 50          | mW               |
| Operating Temperature             | $T_{opr}$ | -40 ... +80 | $^\circ\text{C}$ |
| Storage Temperature               | $T_{sto}$ | -40 ... +80 | $^\circ\text{C}$ |
| Soldering Temperature (max. 10 s) | $T_{sol}$ | 260         | $^\circ\text{C}$ |

#### Specifications ( $T_a=25^\circ\text{C}$ )

| Item                    | Value                    | Unit        |
|-------------------------|--------------------------|-------------|
| Sensitive Area          | Ø 75                     | µm          |
| Spectral Response Range | 900 .. 1650              | nm          |
| Responsivity            | $\lambda=1310\text{ nm}$ | $\geq 0.8$  |
|                         | $\lambda=1550\text{ nm}$ | $\geq 0.85$ |
| Linear Range (0 V)      | -                        | -70 .. +10  |
| Capacitance (-5 V)      | $\leq 1$                 | pF          |
| Dark Current (-5 V)     | $\leq 1$                 | nA          |
| Operating Voltage       | 0 .. -5                  | V           |
| Linearity               | $\pm 0.2$                | dB          |



## Outline Dimensions

### TO-46 (flat window):

