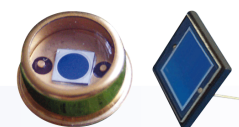


# UV/Blue Enhanced Photodiodes

## Series 2



### Special characteristics

- long-term stability
- high shunt resistance and high sensitivity
- UV/ Blue enhanced

Application  
Optimized  
Solutions

### General ratings

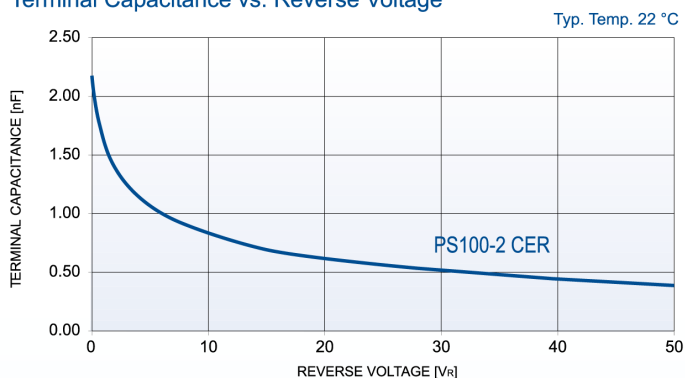
| Type No. |         | Order number | Active Area |                         | Dimensional outline | Absolute maximal ratings |                     |
|----------|---------|--------------|-------------|-------------------------|---------------------|--------------------------|---------------------|
| Chip     | Package |              | Size (mm)   | Area (mm <sup>2</sup> ) | window material     | operating temperature    | storage temperature |
| PS33-2   | TO8     | 501232       | 5.7 x 5.7   | 33                      | UV clear glass      | -40 ...+100 °C           | -55 ...+125 °C      |
| PS1-2    | LCC6.1  | 500981       | 1.0 x 1.0   | 1                       | quartz glass        | -40...+100 °C            | -55 ...+120 °C      |
| PS1-2    | TO52    | 501103       | 1.0 x 1.0   | 1                       | UV clear glass      | -40...+100 °C            | -55 ...+120 °C      |
| PS100-2  | CERpin  | 500047       | 10 x 10     | 100                     | Quartz glass        | -20...+60 °C             | -20...+80 °C        |
| PS100-2  | BNC     | 501261       | 10 x 10     | 100                     | Quartz glass        | -20...+60 °C             | -20...+80 °C        |
| PC50-2   | BNC     | 500045       | Ø 7.98      | 50                      | Quartz glass        | +15 ...+60 °C            | -15 ...+80 °C       |
| PS7-2    | TO5     | 501230       | 2.66 x 2.66 | 7                       | clear glass         | -40 ...+100 °C           | -55 ...+125 °C      |
| PS13-2   | TO5     | 501231       | 3.5 x 3.5   | 13                      | clear glass         | -40 ...+100 °C           | -55 ...+125 °C      |

### Electrical and optical characteristics (Typical values at 22°C)

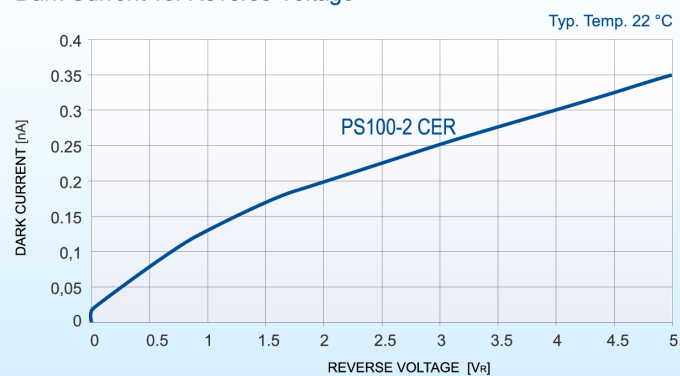
| Type No. |         | Spectral Responsivity (A/W) |           |           | Dark current (nA) | Capacitance (pF) | Rise time (ns)       | Shunt Resistance (MΩ) | N.E.P (w/Hz ½)        |
|----------|---------|-----------------------------|-----------|-----------|-------------------|------------------|----------------------|-----------------------|-----------------------|
| Chip     | Package | at 200 nm                   | at 340 nm | at 900 nm | at 5 V            | at 5 V           | at 410 nm, 5 V, 50 Ω | at 10 mV              |                       |
| PS33-2   | TO8     |                             | 0,22      | 0,45      | 2                 | 4000             | 600                  | typ. 100              | 2*10 <sup>-14</sup>   |
| PS1-2    | LCC6.1  | Typ. 0,22                   |           |           | 0.01              | 50               | 50                   | 10000                 | 5*10 <sup>-15</sup>   |
| PS1-2    | TO52    | Typ. 0,22                   |           |           | 0.01              | 50               | 50                   | 10000                 | 5*10 <sup>-15</sup>   |
| PS100-2  | CERpin  | Typ. 0,1                    | 0,17      | 0,42      | 10                | 1000             | 2000                 | typ. 200              | 4*10 <sup>-13</sup>   |
| PS100-2  | BNC     | Typ. 0,1                    | 0,17      | 0,42      | 10                | 1000             | 2000                 | typ. 200              | 4*10 <sup>-13</sup>   |
| PC50-2   | BNC     | Typ. 0,1                    | 0,17      | 0,42      | 5                 | 650              | 1000                 | typ. 70               | 6*10 <sup>-14</sup>   |
| PS7-2    | TO5     |                             |           |           | 0.4               |                  | 600                  | 1000                  | 1,6*10 <sup>-14</sup> |
| PS13-2   | TO5     |                             |           |           | 1                 |                  | 300                  | 400                   | 4*10 <sup>-14</sup>   |

## UV/Blue Enhanced Photodiodes - Serie 2

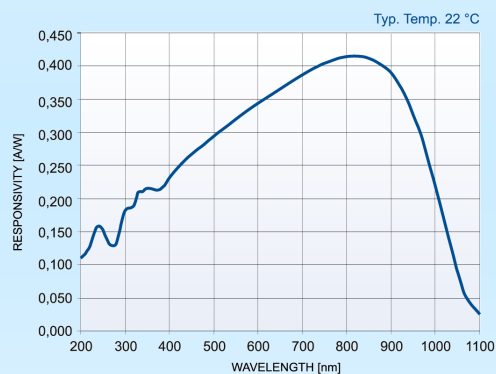
### Terminal Capacitance vs. Reverse Voltage



### Dark Current vs. Reverse Voltage

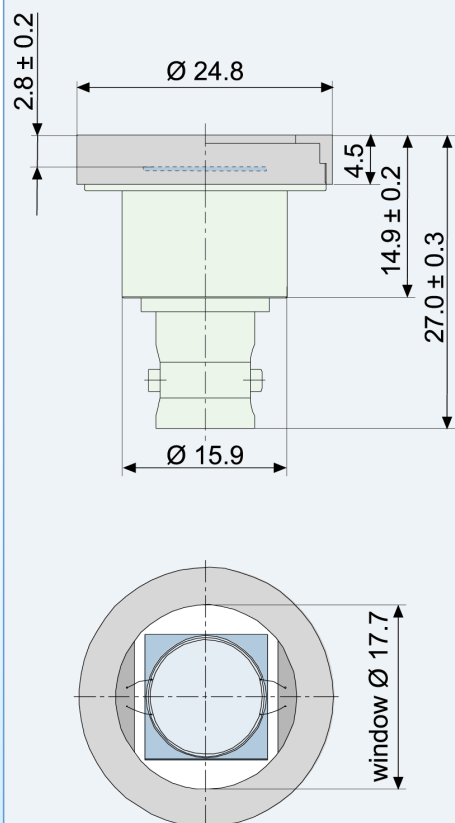


### Typical Spectral Response



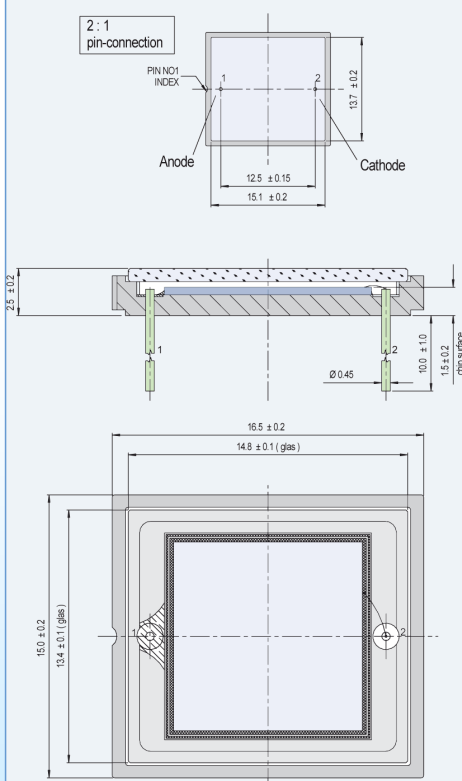
## UV/Blue Enhanced Photodiodes - Serie 2

BNC

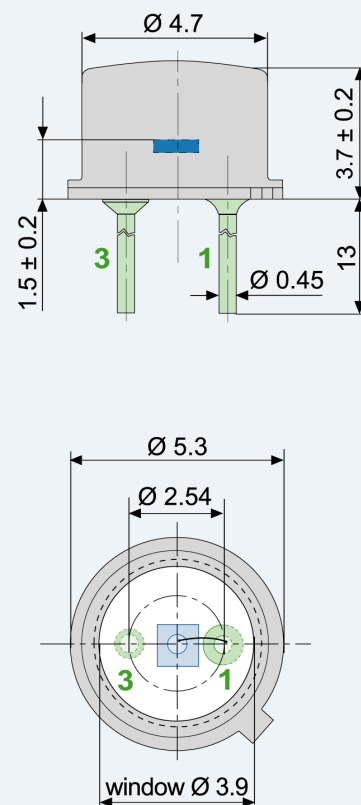


Centre pin = Anode  
Case = Cathode

CERPIN



TO52



## UV/Blue Enhanced Photodiodes - Serie 2

