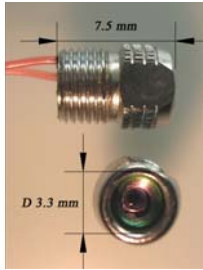
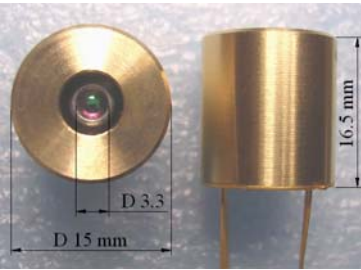
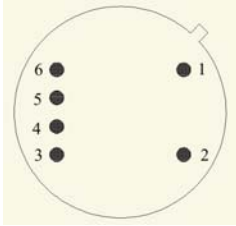


| Optically Immersed 2.9 $\mu\text{m}$ photodiode |                              |                                  | PD29Sc                  |
|---|------------------------------|----------------------------------|-------------------------|
| Peak wavelength                                 | $\lambda$                    | $\mu\text{m}$                    | 2.85 $\div$ 2.95        |
| Cutoff wavelength (10 %)                        | $\lambda_{\text{co}}$        | $\mu\text{m}$                    | 3.2 $\div$ 3.3          |
| Detectivity                                     | $D^*_{\lambda_{\text{max}}}$ | $\text{cmHz}^{1/2}\text{W}^{-1}$ | $\geq 6 \times 10^{10}$ |
| Current sensitivity                             | $S_I$                        | A/W                              | $\geq 0.6$              |
| Voltage sensitivity                             | $S_U$                        | V/W                              | $\geq 900$              |
| Resistance at zero bias                         | $R_0$                        | Ohm                              | $\geq 1.5\text{k}$      |
| Switching time                                  | $\tau$                       | ns                               | $\leq 20$               |

| Code       | Thread          | Sensitive area, mm | Lens material             | Angle of view FWHM, deg. | Operation (storage) conditions, $^{\circ}\text{C}$ | Polarity                              |
|------------|-----------------|--------------------|---------------------------|--------------------------|--|---------------------------------------|
| PD29Sc     | M5 $\times$ 0.5 | $\varnothing$ 3.3  | Si                        | $\leq 20$                | -25 $\div$ +60 (+80)                               | short wire or black point is negative |
| PD29TO8TEC |                 |                    | Si lens and quartz window |                          |  | See fig. below                        |

|              | PD29Sc   | PD29TO8TEC   |   |
|--------------|--|--|---|
| Product view |  |  |  <p>1 TEC -<br/>2 TEC +<br/>3 PD +<br/>4 thermosensor<br/>5 thermosensor<br/>6 PD -</p> <p>TEC and thermosensor specifications are available on request.</p> |
|              |  |  |   |

- ✓ All devices are stressed at 80 $^{\circ}\text{C}$  for 10 hrs before final test and shipping to a customer.
- ✓ Angle of view of the PD is small and thus we recommend adjusting PD position before final evaluation/use of the devices.
- ✓ All data are valid for room temperature (22 $^{\circ}\text{C}$ ).
- ✓ PD could be equipped with preamplifier. Preamplifier has been designed for conversion of PD photocurrent into a convenient output voltage. Normally each preamplifier is adjusted for the particular PD and specifications issued by a customer (e.g. taking into account the  $R_0$  value and frequency range).

