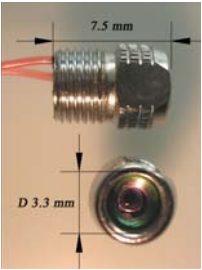
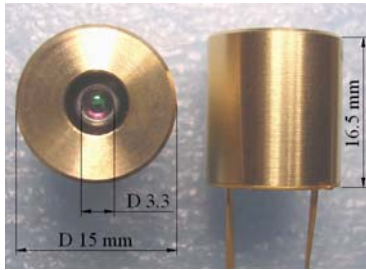
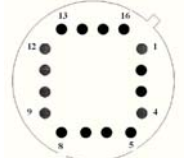


Optically Immersed 3.4 μm photodiode			PD34Sc
Peak wavelength	λ	μm	3.35
Cutoff wavelength (10 %)	λ_{co}	μm	3.7
Detectivity	$D^*_{\lambda_{\text{max}}}$	$\text{cmHz}^{1/2}\text{W}^{-1}$	$\geq 0.8 \times 10^{11}$
Current sensitivity	S_I	A/W	≥ 1.0
Voltage sensitivity	S_U	V/W	≥ 1000
Resistance at zero bias	R_0	Ohm	$\geq 1\text{k}$
Switching time	τ	ns	≤ 20

Code	Thread	Sensitive area, mm	Lens material	Angle of view FWHM, deg.	Operation (storage) conditions, °C	Polarity
PD34Sc	M5×0.5	Ø 3.3	Si	≤ 20	-25÷+60 (+80)	short wire or black point is negative
PD34TO8TEC			Si lens and quartz window			See fig. below

Product view	PD34Sc	PD34TO8TEC	
			 1 TEC -; 4 TEC + 8 PD +; 13 PD - 10, 11 thermosensor, 16 PD house

- ✓ Angle of view of the PD is small and thus we recommend adjusting PD position before final evaluation/use of the devices. All data in spec. are valid for room temperature (22°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).
- ✓ The maximal cooling in PD42TO8TEC mounted onto a heatsink is around $\Delta T = -50$ K (at current through TEC of 0.8 A)

Spectral sensitivity, current-voltage curve, angle of view and temperature dependences of λ_{max} and cut off wavelength (10%), zero bias resistance and detectivity.

