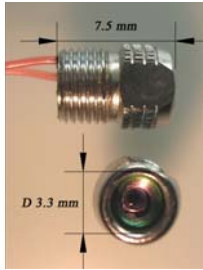
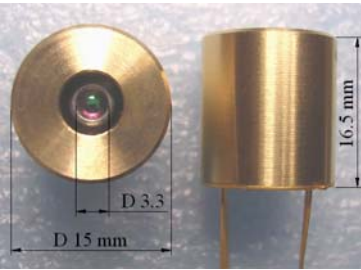
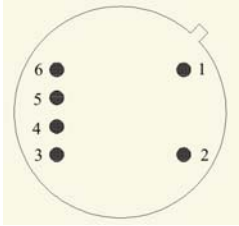


Optically Immersed 3.8 $\mu\text{m}$ photodiode			PD38Sc
Peak wavelength	$\lambda$	$\mu\text{m}$	3.7÷3.9
Cutoff wavelength (10 %)	$\lambda_{\text{co}}$	$\mu\text{m}$	4.4÷4.5
Detectivity	$D^*_{\lambda_{\text{max}}}$	$\text{cmHz}^{1/2}\text{W}^{-1}$	$\geq 1.4 \times 10^{10}$
Current sensitivity	$S_I$	A/W	$\geq 1.0$
Voltage sensitivity	$S_U$	V/W	$\geq 100$
Resistance at zero bias	$R_0$	Ohm	$\geq 100$
Switching time	$\tau$	ns	$\leq 20$

Code	Thread	Sensitive area, mm	Lens material	Angle of view FWHM, deg.	Operation (storage) conditions, °C	Polarity
PD38Sc	M5×0.5	Ø 3.3	Si	$\leq 20$	-25÷+60 (+80)	short wire or black point is negative
PD38TO8TEC			Si lens and quartz window			See fig. below

Product view	PD38Sc	PD38TO8TEC	
			

- ✓ All devices are stressed at 80°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°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).

