

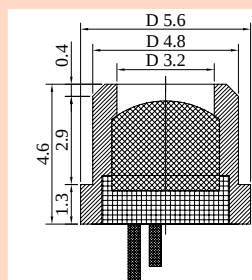
Optically Immersed 7.0 μm LED in heat-sink optimized housing

**OPLED70Su,
OPLED70Sr**

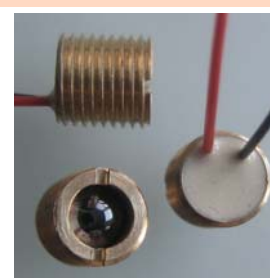
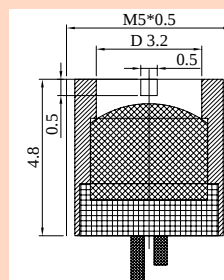
Peak wavelength λ_{max}	μm	6.5÷7.0	
Pulse power P_{pulsed}	μW	Drive current 1 A, 2 % duty cycle	5÷10
Quasi-CW power P_{QCW}	μW	Drive current 0.2 A, 50% duty cycle	1.5÷3
CW power P_{CW}	μW	Drive current 0.1 A	1÷1.8

Code	Emission size, mm	Lens material	Far-field pattern FWHM, deg.	Optical axis deviation, deg.	Optical power deviation, %	Operation conditions, °C	Lifetime, hrs	Polarity
OPLED70Su/Sr	$\varnothing$ 3	CdSb or Ge	≤ 30	≤ 5	± 25	-25÷+40	>20 000	Red point on house – positive

Product view



OPLED70Su



OPLED70Sr

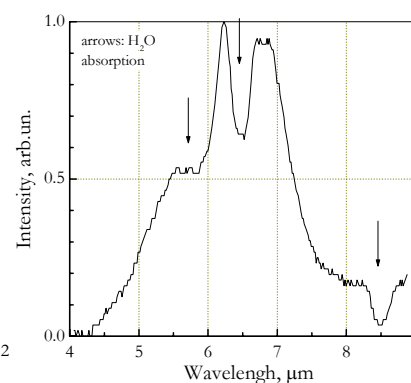
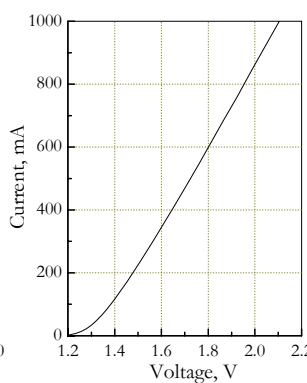
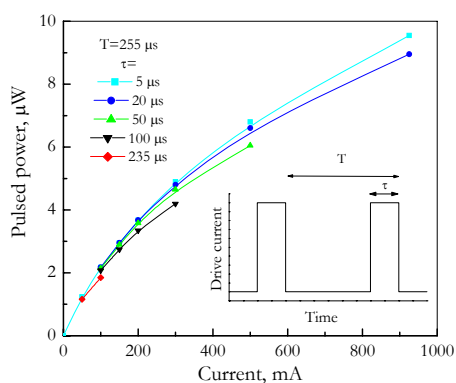
Features

Optical coupling through the use of chalcogenide glasses and lenses with antireflection coating

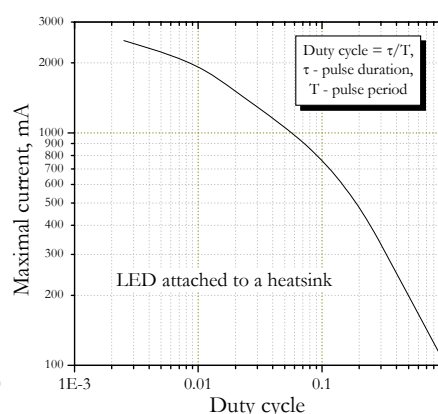
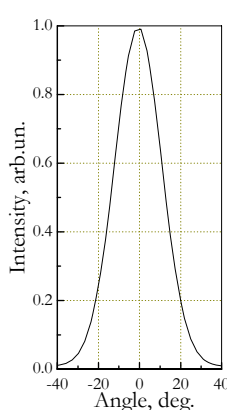
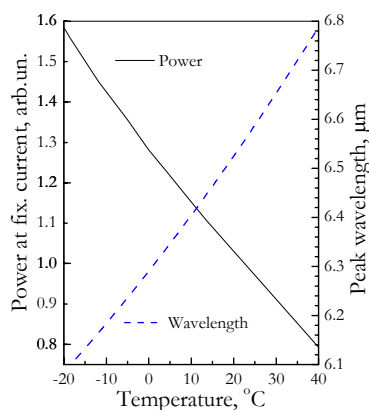
3-fold increased LED output power; Beam collimation; Small on-off time (tenths of ns)

Emission beam divergence is small and thus we recommend adjusting LED position regarding to the detector system before final evaluation/use of the devices. We recommend if possible using low duty cycle mode of operation with $I < 0.5 \times I_{\text{max}}$ so that higher efficiency and long term stability of a LED are achieved. **Data are valid for 22°C and LED attached to a heatsink.** Heatsink is important for LED operation especially in the CW mode.

L-I and I-V characteristics and emission spectra



Output power and peak wavelength vs temperature, far-field pattern and maximal current vs operation conditions



Product specifications are subject to change without prior notice due to improvements or other reasons. Updated 14.10.11



**ООО «Иоффе ЛЕД»
Ioffe LED, Ltd**

Politechnicheskaya 26,
St.Petersburg, 194021, RUSSIA

<http://www.ioffleled.com>
e-mail: Mremennyy@mail.ioffe.ru
Tel./fax: +7 812 297 7446