

# HSH1500PILO

## Lamps for Photolithography



### Description

PerkinElmer Optoelectronics is a leading manufacturer of mercury short arc lamps ranging in output power from 1000 to 8000 watts. These lamps are used in the production of printed circuit boards, liquid crystal displays and semiconductors. The HSH Series lamps are used worldwide in microlithography systems manufactured by ASML, Canon, GCA, Nikon, Karl Suss, Ultratech Stepper, and SVG. With extremely high stability, uniform output distribution and extended lamp lifetimes, the HSH Series has become the lamp choice of many of the world's leading semiconductor manufacturers.

PerkinElmer has been a leading manufacturer of high intensity arc lamps for more than 30 years and is a premier lamp supplier for solid state lasers, medical equipment, NASA space systems and microlithography. PerkinElmer has steadily advanced lamp performance from 1000 watts to 8000 watts. With the introduction of new materials and proprietary manufacturing processes, we have extended lamp lifetimes from several hundred

hours to more than two thousand hours. The HSH Series provides longer lifetimes, outstanding uniformity, and excellent spectral quality which results in increased throughput, reduced downtime and an overall reduction in the cost of ownership.

### Applications

- Microlithography

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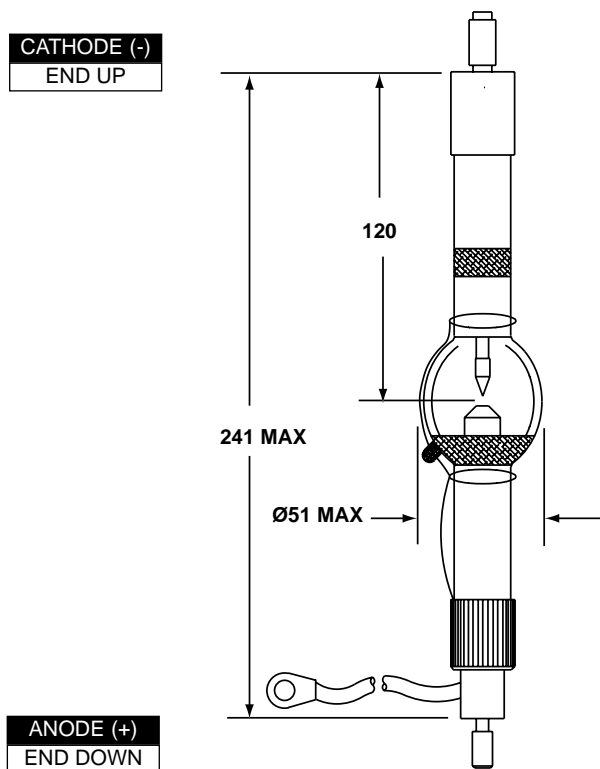
## Operational Specifications

Description	Nominal	Range
Power	1500 watts	
Current	65.2 amps (DC)	57.5-75 amps (DC)
Voltage	23 volts (DC)	20-26 volts (DC)
Current Ripple	3%	
Temperature (at base)	220°C	
Lifetime	1500 hours	

## Physical Specifications

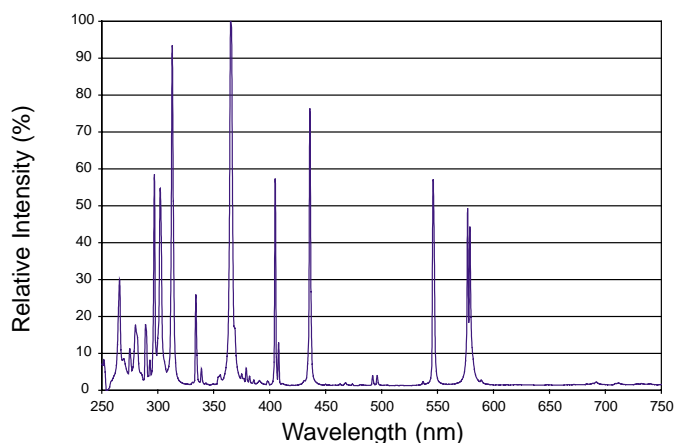
Description	Specification
Arc Gap	4.0 mm (max)
Anode Base	M6-P1.0
Cathode Base	M10-P1.5

## Dimensions

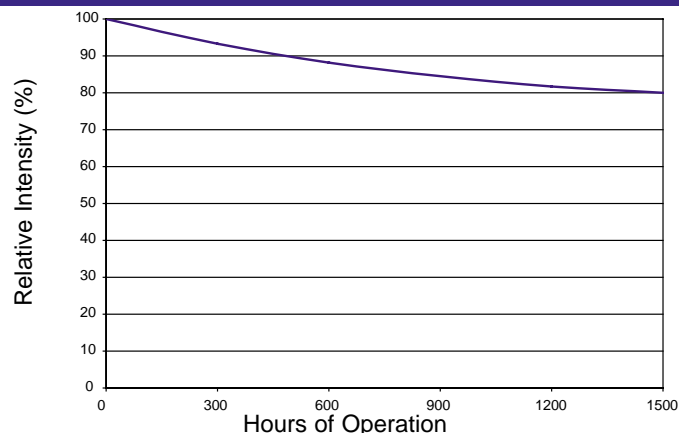


All dimensions are in millimeters.

## Spectral Output



## Typical Performance Graph



## Notes

- Lamp must be operated with cathode end up and anode end down. Inclination of lamp axis to vertical must not exceed 10°.

## Part Number References

Used In	ASML 5500/100C, 100D
Replaces	SUV 1500 SIL HBO 1500 W/PIL

PerkinElmer welcomes inquiries about special lamps. We would be pleased to discuss the requirements of your application and the feasibility of designing a lamp specifically suited to your needs.

For more information e-mail us at [opto@perkinelmer.com](mailto:opto@perkinelmer.com) or visit our web site at [www.perkinelmer.com/opto](http://www.perkinelmer.com/opto).

All values are nominal; specifications subject to change without notice.

USA:  
PerkinElmer Optoelectronics  
44370 Christy St.  
Fremont, CA 94538  
Phone: (510) 979-6500  
Fax: (510) 687-1140

Europe:  
PerkinElmer Optoelectronics GmbH  
Wenzel-Jaksch-Str. 31  
65199 Wiesbaden  
Germany  
Phone: +49 611 492 0  
Fax: +49 611 492 177

Asia:  
PerkinElmer Optoelectronics  
47 Ayer Rajah Crescent #06-12  
Singapore 139947  
Phone: +65 775 2022  
Fax: +65 775 1008

