

## Technical Information

No. FO 4054

Edition: 10/98 - subject to change

Substitutes: Edition 06/95

Status: valid

Mercury Short Arc Lamp  
for Microlithography

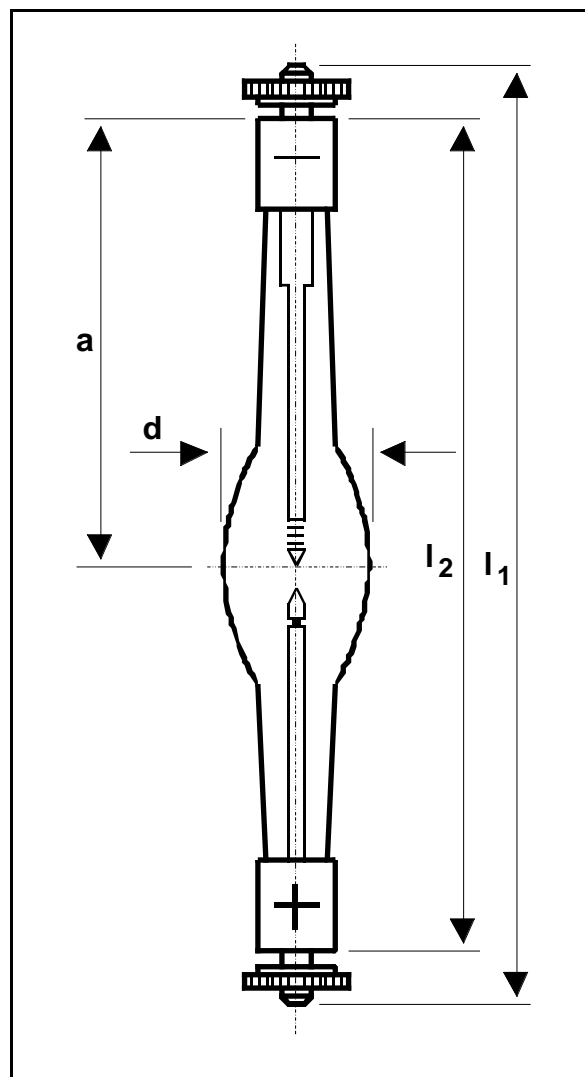
**HBO<sup>®</sup> 350 W/S**

### n Product description

The OSRAM HBO<sup>®</sup> 350 W/S is designed for the manufacture of integrated circuits (photolithography). The lamp emits high radiation in the 350 - 450nm wavelength range and is especially designed for the use in Süss mask aligners. The HBO<sup>®</sup> 350 W/S is mainly used in the effect light and commercial projection field.

### n Technical data

Order reference		HBO <sup>®</sup> 350 W/S
Rated lamp wattage	W	350
Rated lamp voltage	V	68
Rated lamp current (=)	A	5,15
Ignition voltage	kV <sub>s</sub>	max. 15
Radiant power (wave length range 350 - 450nm)	W	50
Radiant intensity (wave length range 350 - 450nm)	mW/sr	4.700
Average luminance	cd/cm <sup>2</sup>	53.000
Electrode gap e	mm	3
Lamp length (overall) l <sub>1</sub>	mm	--- / max. 127
Lamp length l <sub>2</sub>	mm	101 / max. 103
Bulb diameter d	mm	20
LCL a	mm	52,5
Average service life	h	600
Base		SFcY 10-4 with thread 8-32 UNC-3A



### n Lamp operation

Maximum permissible base temperature	°C	200
Cooling		Convection
Burning position		vertical, Anode (+) underneath

The HBO<sup>®</sup> 350 W/S can either be operated on standard ballasts or on electronic power supplies (ECG).

### n Safety Instruction

Because their high luminous efficacy, the UV radiation which they emit and the high pressure within the lamp, HBO<sup>®</sup> lamps may only be operated within enclosed, purpose-built housings. When a lamp breaks, mercury is released. Particular safety regulations should be paid attention (for details please request technical information sheet no. FO 4574).