Technical Information
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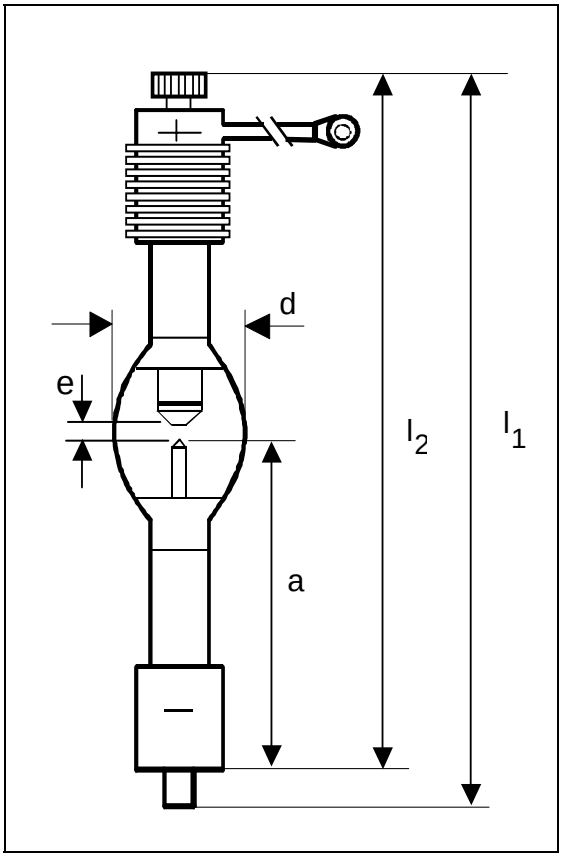
Mercury Short Arc Lamp
for Microlithography

HBO® 3501 W/PIL SHP

■ Product description

The OSRAM HBO® 3501 W/PIL SHP is a direct current i-line lamp for microlithography processes within the wafer fabrication for Integrated Circuits. This lamp type emits a very high radiant intensity in the ultraviolet and visible wavelength range and is developed and optimized for being used in ASML equipment (PAS 5500/400 B/C). Due to **SHP**-technology, the lamp is characterized by a very low intensity degradation over lifetime.



■ Technical data

Order reference		HBO® 3501 W/PIL
Rated lamp wattage	W	3,400
Rated lamp voltage	V	23
Rated lamp current (=)	A	148
Ignition voltage (cold)	kV_S	max. 20
Radiant intensity (wave length range 365 ± 2,5 nm)	mW/sr	9,000
Electrode gap e	mm	4.5
Lamp length l_1	mm	max. 360
Lamp length l_2	mm	322
Bulb diameter d	mm	77
LCL a	mm	154
Guaranteed life	h	1500
Base		• Cathode: SFc 32.5-6.7/50 • Anode: SFaX 40-6/50 with cable connection (M10)

■ Lamp operation

Maximum permissible base temperature	°C	200
Cooling		Forced base cooling
Burning position		Vertical, anode up

■ Safety Instruction

Due to their high luminous efficacy, the UV radiation which they emit and the high pressure within the lamp, HBO® 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).

Display/Optic Division
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