

Technical Information

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Mercury Short Arc Lamp
for Microlithography

HBO[®] 4001 W/PL (HP)

■ Product description

The OSRAM HBO[®] 4001 W/PL (HP) is a direct current mercury short arc lamp, optimised for DUV emission and designed for the manufacture of integrated circuits (microlithography). This lamp type emits a very high radiant intensity in the ultraviolet and visible wavelength range and is optimized for use in SVGL equipment (Micrascan II) within semiconductor applications.

■ Technical data

Order reference		HBO [®] 4001 W/PL SHP
Rated lamp wattage	W	3,500
Rated lamp voltage	V	38
Rated lamp current (=)	A	92.5
Electrode gap e (cold)	mm	5
Lamp length (overall) l_1	mm	max. 365
Lamp length l_2	mm	max. 342
Bulb diameter d	mm	77
LCL a	mm	158
Guaranteed life	h	2.500

Base	• Cathode: SFc 33.5-10/50
	• Anode: SF 33.5/50 with cable connection

■ 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 must be operated within enclosed, purpose-built housings. When a lamp breaks, mercury is released. Particular safety regulations must be paid attention (for details please request technical information sheet no. FO 4574).

