

Technical Information

No. FO 5447

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Substitutes: --/--

Status: valid

Mercury Short Arc Lamp
for PCB manufacturing

HBO[®] 5000 W/S

■ Product description

The OSRAM HBO[®] 5000 W/S is a direct current mercury short arc lamp designed for the manufacture of semiconductors within Suss Microtec 200 and 300 mm mask aligner systems (lamp-house LH 5000 only). This lamp type emits a very high radiant intensity in the ultraviolet and visible wavelength range and is designed with the latest technology for a low intensity degradation over lifetime.

■ Technical data

Order reference	HBO [®]	5000 W/S
Rated lamp wattage	W	5,000
Rated lamp voltage	V	50
Rated lamp current (=)	A	100
Ignition voltage (cold)	kV _s	max. 25
Radiant intensity (350-450 nm) typical	W/sr	60
Electrode gap e (cold)	mm	7.5
Lamp length (overall) l ₁	mm	358 / max.360
Lamp length l ₂	mm	318
Bulb diameter d	mm	80
LCL a	mm	143.5
Guaranteed life	h	1000

Base

- Cathode: SFa 33.5-7.85/50
- Anode: SFa 33.5-9.4/50 with cable connection (M10), **Cable length 235 mm.**

■ 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).

