

Technical Information

No. FO 4786

Edition: 06/00 - subject to change

Substitutes: 10/98

Status: valid

Mercury Short Arc Lamp
for Microlithography

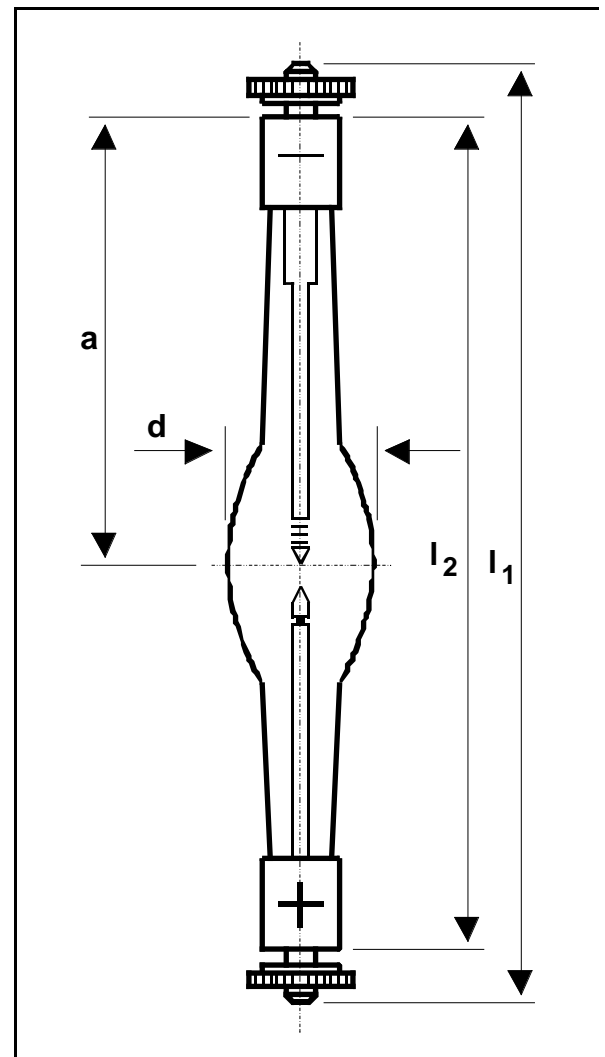
HBO[®] 350 W

n Product description

The OSRAM HBO[®] 350 W is a direct current mercury short arc lamp designed for the manufacture of integrated circuits (microlithography). This lamp type emits a very high radiant intensity in the 350 - 450 nm wavelength range and is especially suited for ASM-L equipment (PAS 2500). The HBO[®] 350 W replaces the HBO[®] 350 W/G.

n Technical data

Order reference		HBO [®] 350 W
Rated lamp wattage	W	350
Rated lamp voltage	V	67,5
Rated lamp current (=)	A	5,3
Ignition voltage	kV _s	max. 20
Radiant power (wave length range 350 - 450nm)	W	46
Radiant intensity (wave length range 350 - 450nm)	mW/sr	4.600
Average luminance	cd/cm ²	53.000
Electrode gap e	mm	2,9
Lamp length (overall) l ₁	mm	max. 128
Lamp length l ₂	mm	100 / max. 102
Bulb diameter d	mm	20
LCL a	mm	45
Average service life	h	600
Base		SFcY 10-4/15 with thread 8-32 UNC-3A



n Lamp operation

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

The HBO[®] 350 W 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[®] 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).