

VUV LIGHT SOURCE

S2D2 VUV LIGHT SOURCE UNIT L10706 SERIES

OVERVIEW

The S2D2 VUV light source unit is a vacuum ultra-violet light source unit that incorporates a compact deuterium lamp with an MgF₂ window.

Equipped with a SUS flexible tube with a vacuum flange and a unique cooling mechanism, this light source unit allows irradiating objects or samples at a very close distance, and can be installed and operated under depressurized conditions.

The compact lamp unit and SUS flexible tube offer greater flexibility in attaching the light source unit to various types of equipment.



▲Left: Light Source, Right: Power Supply

FEATURES

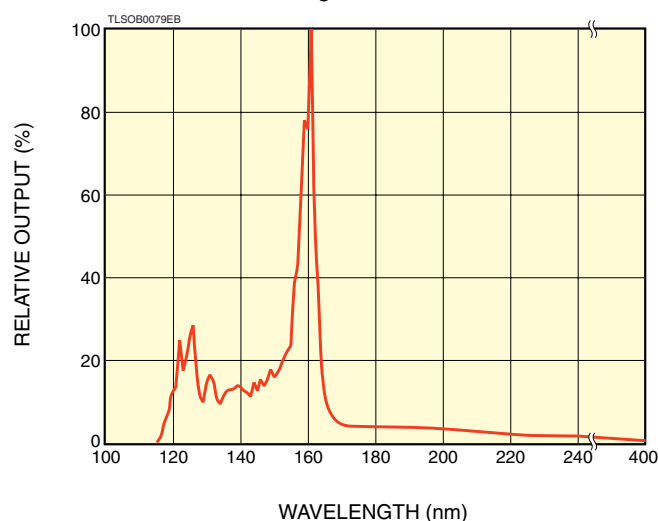
- Enable Proximity Irradiation
- Easy Lamp Replacement
- Compact
- Long Life
- Spectral Distribution: 115 nm to 400 nm
- External Control

APPLICATIONS

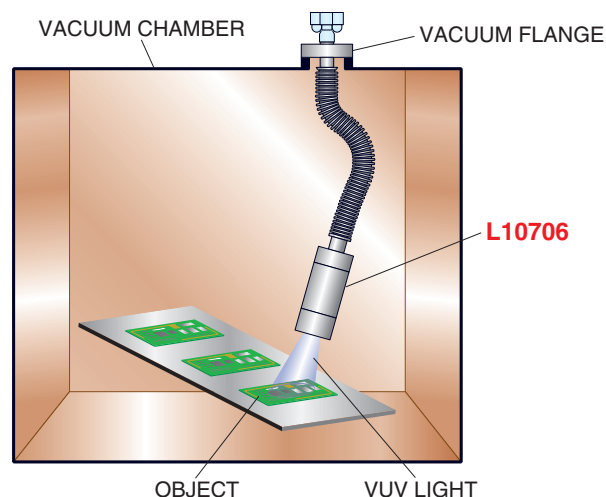
- Electrostatic Remover*
- VUV Spectrophotometer
- Photoionization
- UV Resistance Testing of Various Material
- Excitation Light Source

SPECTRAL DISTRIBUTION

AT INITIAL LIGHTING (VUV region)



APPLICATION EXAMPLE



TL50C0003EA

CHARACTERISTICS

GENERAL

Parameter	Description / Value	Unit
Spectral Distribution	115 to 400	nm
Window Material	MgF ₂	—
Light Angle	±7.5	degree
Vacuum Flange [Ⓐ]	ICF-70 rotating flange	—
Cooling Method [Ⓑ]	Air-cooled	—
Sealing Force Retention	Below 5×10^{-5} Pa L/s (1×10^{-6} Torr L/s)	—
Operating Ambient Temperature	+10 to +35	°C
Operating Ambient Humidity	Below 80 (No condensation)	%
Storage Temperature	-10 to +60	°C
Storage Humidity	Below 80 (No condensation)	%

Ⓐ Use a copper gasket for sealing the light source unit's vacuum flange and an O-ring for installing a replacement lamp.

Ⓑ Cooling must be performed by supplying cooling air from the high-pressure tube.

RECOMMENDED OPERATING CONDITIONS AND CHARACTERISTICS (at 25 °C)

Parameter	Description / Value	Unit
Warm-up Time	25±5	s
Output Stability	Fluctuation (p-p) (Max.)	%
(at 230 nm)	Drift (Max.)	%/h
Guaranteed Life [Ⓒ] (230 nm)	1000	h
Input Voltage (AC) [Ⓓ]	100 V to 240 V (100 V / 200 V Automatic selection), Single phase 50 Hz / 60 Hz	—
Power Consumption (Max.)	40	VA

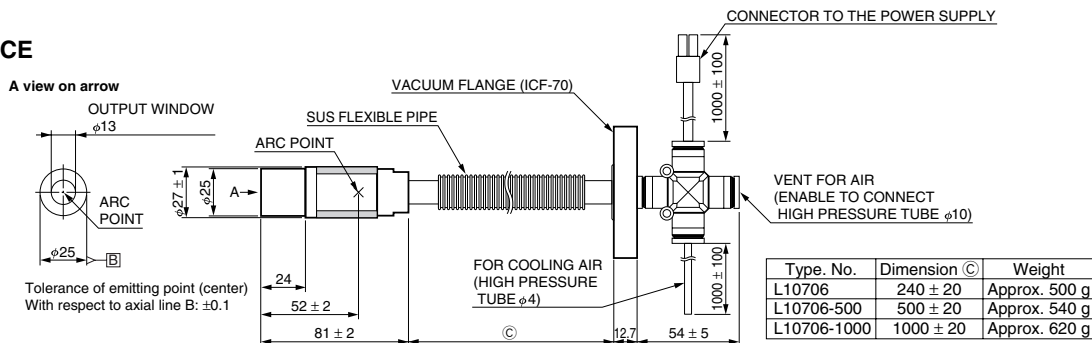
Ⓒ The life end is defined as the time when the light intensity falls to 50% of the initial value or noise greater than 0.05%(p-p) appears in the radiant output. Life characteristics in the vacuum UV region differ depending on the atmosphere in which the lamp is used. The L10706D is provided as a lamp for maintenance.

Ⓓ Input voltage to the power supply DC jack is 12 V (10.8 V dc to 13.2 V dc, 17 W or less).

* Light sources can be modified to meet your specific needs. Please contact us if needed. (Example: Modification to SUS flexible tube and vacuum flange)

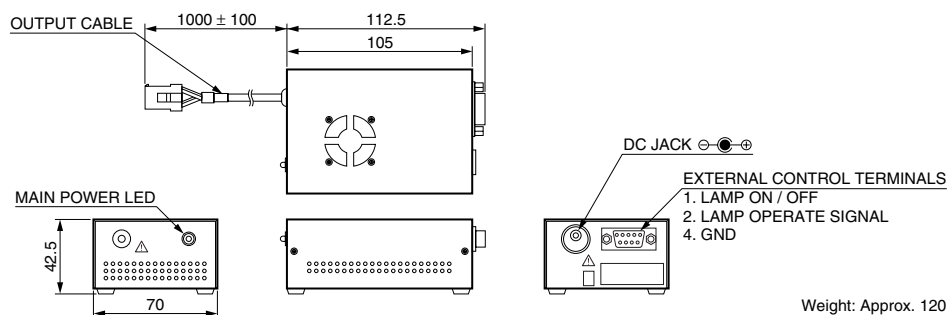
DIMENSIONAL OUTLINES (Unit: mm)

● LIGHT SOURCE



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● POWER SUPPLY



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* Patents: US PAT. No. 5596478, EP PAT. No. 0597103 Takasago Thermal Engineering CO, Ltd. holds above patents.

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