Safety Information

Warning

- Do not bump, apply excessive stress or scratch the lamp, as the lamp is glass pressed filled with high pressure gas. Otherwise it could cause an injury from lamp breakage.
- Do not open the lamp during lamp operation or until the lamp properly cooled down after the lamp is turned off. The internal pressure of the lamp is significantly high when the lamp is turned on, immediately after it is turned off, whereas it could cause an injury from lamp breakage.
- Do not touch the lamp during lamp operation or until the lamp properly cooled down after the lamp is turned off. Otherwise it could cause a burn.
- Do not open the lamp in a place where there is paper, cloth or any other combustible material during lamp operation or until the lamp properly cooled down after the lamp is turned off. Otherwise it could cause a fire.
- Transport, store and dispose of lamps including used lamps in original packaging and the protective cover if attached. Otherwise it could cause an injury from lamp breakage.
- Wear a protective clothing for the face and neck, and long sleeves when installing or removing the lamp to or from equipment. Otherwise it could cause an injury from lamp breakage.
- Do not look directly or indirectly at the light from the lamp without adequate eye protection. Otherwise it could cause eye pain or damage to the eyes.
- Do not expose bare skin directly or indirectly to the lamp emission. Otherwise it could cause skin irritation.
- Turn off the power supply to the lamp when installing or removing the lamp to or from equipment. Otherwise it could cause an electric shock.
- Do not touch any part of the lamp. If plastic envelope is dirty, wipe with alcohol or clean cloth. Otherwise it could cause lamp breakage or shorten lamp life.
- Do not subject the lamps to vibration or shock. Otherwise it could cause lamp breakage or shorten lamp life.
- Do not throw away the original packaging and the protective cover if attached, as they were needed in transporting or disposing of the lamp.
- Store the lamp in the original protective packaging and the protective cover if attached otherwise it could cause lamp breakage.
- Before installing the lamp in equipment, make sure that there is no oil, dust or obstruction where electrical connections are made between the lamp and the equipment.
- Install the lamp in the correct position. Otherwise it could cause lamp breakage or shorten lamp life.
- Install the lamp properly in the equipment. Without bending, folding or otherwise applying excessive stress to the lamp. Otherwise it could cause lamp breakage. Make sure that the lamps is in place, or shorter lamp life.
- Properly attach the lamp lead wire to the terminal, and without applying excessive stress to the lamp. Otherwise it could cause overloading or damage.
- Either base the protective cover is attached, on the lamp during installation and remove it when installation is complete, or remove the protective cover immediately prior to installation.
- Use proper care in installing or removing the lamp to avoid bumping the lamp against anything. Otherwise it could cause lamp breakage or damage to the equipment.
- Please the protective cover if attached, on the lamp immediately before or after removal of the lamp.
- Do not use where vibrations are present otherwise it could cause fire or explosion.
- If a lamp has been used for longer than its rated life, it must be replaced. The rest of lamp operation increases otherwise it could cause lamp breakage.
- In the event the lamps system operation exceed the area and ventilate the area for 30 minutes. There is possibility of7inating mercury fumes containing mercury fumes could be harmful to health.
- After the lamp and lamp housing have cooled down, remove any remaining mercury with a paper towel, or in paper, or syringes.
- In the event of lamp breakage, mercury could be released. If any mercury with a paper towel, or in paper, or syringes.
- If any spilled mercury and the materials used for cleaning mercury is an accident normally container.
- If mercury fumes are inhaled, please consult a physician for medical attention.
- Do not dispose of the regular that the lamp contains mercury and is filled with high pressure gas.

Features & Benefits

- Enhanced electrodes design for precise positioning and high arc stability.
- Improved manufacturing process enables extended life. 
- USHIO developed product with tightly controlled E00 quality processes.

Applications

- Semiconductor circuit formation
- Liquid crystal color filter pattern formation
- Printed substrate pattern formation
- Surface Reform
- UV hardening
Model

UXM-501MD

Initial specifications

Wattage Power Range W 500
Rated Lamp Current A 20
Operating Voltage V 25±2
Useful Power Range A 18–22

Specifications

Cold Arc Gap mm 3
Weight g 79
Avg Rated Life h 600

Intensity (Representative Value)

Horizontal Luminous Intensity (μW/cm²) 210–300nm 360–700nm
(1m from lamp) 276 184
Total Luminous Flux (lm) 20300

Operating Condition

Type Constant Power Control (suggested)
Current Ripple P.P. %MAX 3
Trigger Voltage Min. kV AC 35
Supply Voltage Min. V 135

Lamp House

Position ° Vertical ±15
Base Temperature °C, MAX 200
Bulb Temperature °C 650–750
Forced Cooling Necessary

Lamp Life Curve (Typical Value)

Spectral Distribution

INTRODUCTION

1. As the arc gap increases by electrode evaporation, lamp voltage increases.

2. Be sure to replace the lamp of the rated lamp life. Otherwise it could cause an injury or fire. Average rated life represents the average life span when operated continuously at rated power. The average rated life terminates when either (1) or (2) takes place. When the horizontal brilliance or total luminous flux are reduced by 70% of the initial value, (2) when lighting is no longer possible.

3. Use in well-ventilated and power supply. Otherwise it may cause lamp failure or shortened life.
4. Voltage to ignite lamp. The ignited lamp needs higher voltage to be ignited as electrode evaporation.
5. Open circuit voltage to light the lamp.
6. Adjust the cooling to obtain the center of the operating voltage range.

7. 1. Diameter excludes height of protrusion on lamp base. 2. Length to the center of the cold arc gap.

8. *1 Reference value at horizontal measurement.