UV-C LED Static Antibacterial Module

TH-UVC-D15-DC12V

Description

The TH-UVC-D15-DC12V is a static UVC LED antibacterial module designed for air and liquid sterilization. It is suitable for enclosed chamber structures equipped with water tanks and meets the IP68 waterproofing requirements.

The UVC LED used operates within a wavelength range of 270–280 nm, exhibiting superior and highly efficient sterilization and disinfection efficacy. The surface is equipped with UV-high-transmission quartz lenses, which enhance the effective utilization rate of UVC radiation and significantly improve sterilization performance.

All materials comply with the environmental requirements of RoHS.



Feature

- LED
  - UVC（270-280nm）
- UVC light output efficiency
  - Ultraviolet high-transmission quartz lens

Apply

- Pure Water Dispenser
- ice machine
- air humidifier
- air cleaner
- Aromatherapy diffuser
- Pet Water Dispenser

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1. Parameter

Product Parameter [Ta=25℃]

Project	Specifications	Remarks
Model	TH-UVC-D15-DC12V	-
Rated voltage	DC 12 V	-
Flux of radiation	≥15mW	-
Input currenton	≤150mA	-
UVC wavelength	270-280nm	-
Classification of waterproof	IP68	-
LED lifespan	≥10000h	L70
Insulation voltage rating	No breakdown at DC 500V for 1 minute at 0.1 mA	-
Net weight	10±2g	-
Working temperature	-30℃~60℃	-
Storage temperature	-40℃~85℃	-

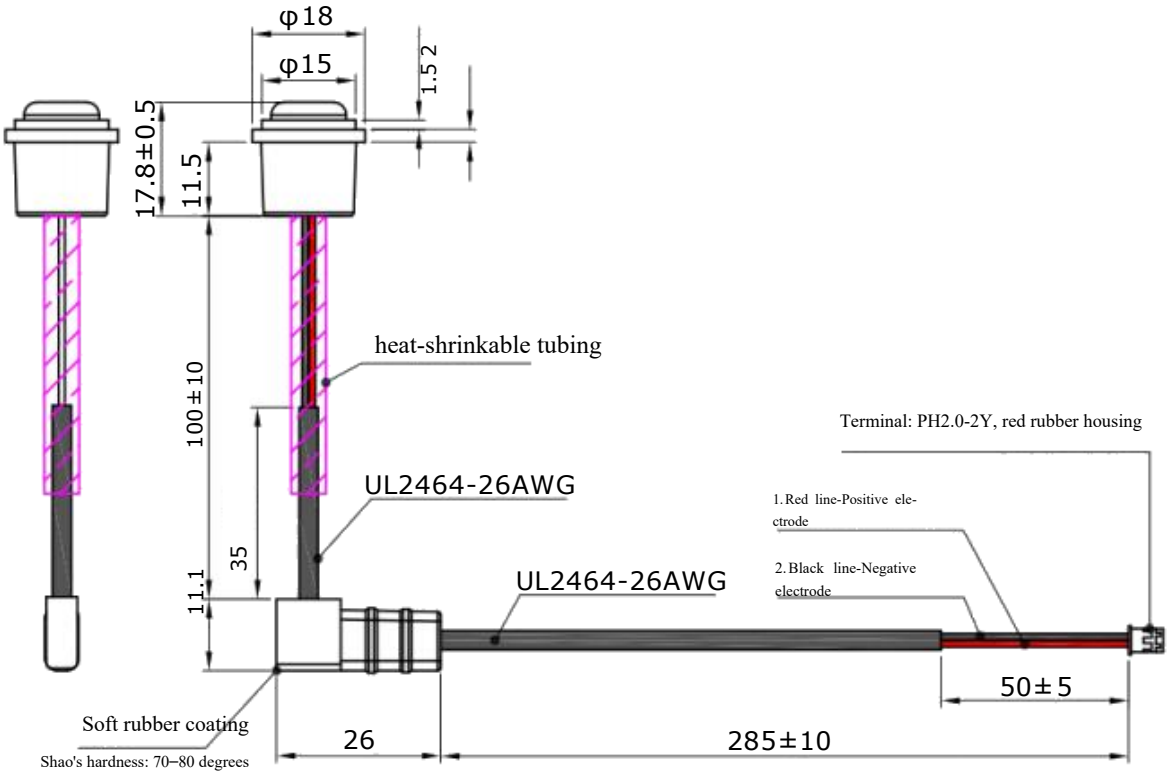
remarks

- The measurement tolerance for the peak wavelength (λp) is ±3 nm.
- The measurement tolerance for radiation flux (Φe) is ±10%.

2. Outline Dimension

- Module size- φ 18 x 17.8 (mm)
- No tolerance specified: ±0.5 mm (for dimensions ≥40 mm); ±0.3 mm (for dimensions <40 mm) heat-shrink sleeve

[Unit: mm]



3. Manner of Packing



Single Module Each PE transparent bag contains 50 modules; one carton consists of 4 layers, with 250 modules per layer, totaling 1,000 modules.

External box dimensions: Length 380 mm x Width 280 mm x Height 320 mm
Weight per box: <12 kg

4. Use the Warning Instructions

1) To prevent energy attenuation, keep the front glass clean.

2) It is recommended that no objects obstruct the light path in front of the module, as this may compromise the sterilization efficacy.

3) Use the correct input voltage to drive this module; otherwise, the module may be damaged.

4) Do not reverse the positive and negative terminals of the module; otherwise, it may be damaged.

5) Human Safety

Exposure to ultraviolet (UV) light can cause damage to the human eyes.

Do not expose yourself directly or indirectly to ultraviolet (UV) light.

If exposure to ultraviolet (UV) radiation is unavoidable, appropriate protective devices such as goggles and clothing should be used to safeguard the body. The following warning labels must be affixed to products/systems utilizing UV LEDs.

