CTS-10494 Technical Data Sheet

1100 VWD UV Lamp, Non Shine-Thru

(Similar to Agilent G1314-60100)

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1.0 Description

The CTS-10494 1100 VWD UV Diode Non-Shine Thru is pictured in Figure 1. This lamp is a pre-aligned direct replacement deuterium lamp for the Agilent 1100 Variable Wave length Detector. It provides the entire light spectrum required by the Detector.

2.0 Specifications

2.1 Operating Specifications

Aperture Dia. Size: 0.5mm
Min. Wavelength: 185nm
Max. Wavelength 400nm
Fluctuation Max.: .05 (%p-p)
Drift Max.: +/-0.3 (%/h)
Filament Warm Up Voltage: 2.5 Vdc
Filament Warm Up Voltage Variation: +/-0.25 Vdc
Filament Warm Up Current: 4 Adc (min./max)
Filament Operating Voltage: 1.7 Vdc
Filament Operating Voltage Variation: +/-0.2 Vdc
Filament Operating Current: 3.3 Adc (min)
Lifetime: 2000 hours

2.2 Lamp Physical Specifications

Materials:
Socket Contacts: Universal Pre-tinned Brass
Connector Plug: Universal Nylon, Natural Color
Lamp Envelope: UV Glass
Lamp Base: 6061 Aluminum
Lamp Screws: Stainless Steel

3.0 Operating Suggestions

Please refer to original manufacturers recommendations and end-user company standard operating procedures.

3.1 Lamp Intensity

It is known within the industry that deuterium lamps exhibit reduced intensity as they age during their normal service life. It is recommended that a VWD Intensity Test be run on the lamp at installation, then regularly during the lamp's service life. It is also recommended that the lamp be replaced at 50% of original intensity.

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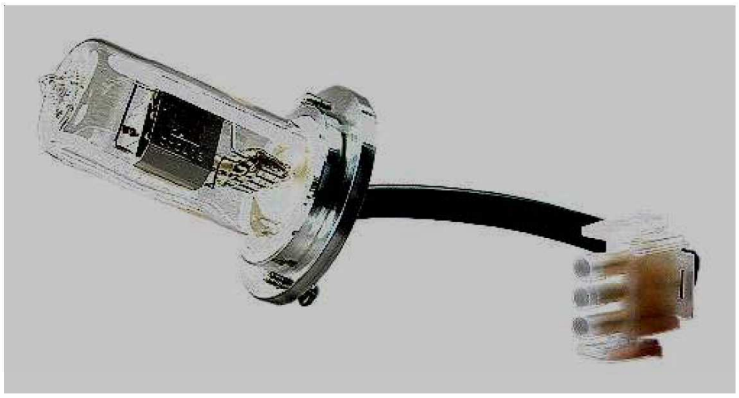

Figure 1

3.2 Handling and Installation

The lamp is sensitive to physical shock such as being dropped. It is recommended that you avoid shock when installing or handling the lamp. If it is suspected that a lamp has been subjected to excessive shock, it is recommended that a VWD Intensity Test be run to verify that intensity is acceptable. An acceptable VWD Intensity Test will not, however, guarantee that no damage occurred.

3.3 Fingerprints

Fingerprints on the glass envelope affect the lamp's performance. It is highly recommended that the lamp's envelope not be touched. If there is any chance that there are fingerprints on the lamp's envelope, wipe the envelope with methanol using a lint-free tissue and allow to dry prior to installation.

3.4 Flow Cells

It is important to clean the flow cell regularly. If the flow cell is not clean, the amount of light passing through the flow cell may be insufficient and will affect the light intensity. If after replacing a lamp, the detector performs poorly, it is recommended that you check to make sure that the flow cell is clean, leak free, and the proper type of flowcell per application being used.

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4.0 Warranty

CTS warrants this product for 2000 hours or one year from from purchase date whichever comes first. CTS also warrants the product to be free of defects in materials and workmanship and will replace without cost the product which carries such defects. Please call 1-800-682-6480 for a **Return Authorization Number** before sending your return to CTS.

5.0 Lamp Replacement

5.1 General Criteria for Lamp Replacement

a. Lamp will not ignite.
b. Noise or drift exceeds application limits.
c. Dictated by Preventive Maintenance Schedule per end-user company SOP.
d. Lamp energy is below 50% of original intensity as recorded during initial installation.

5.2 Installation Instructions

a. Turn the lamp(s) off.

Caution: If the detector has been in use, the lamp may be hot. It is important to wait until the lamp has properly cooled.

b. Press release buttons and remove the front cover to gain access the flow cell area.
c. Disconnect the plug from the connector and loosen the screws to remove the lamp.
d. Exchange the lamp.

Note: Fingerprints on the lamp's (glass) envelope affect the lamp's performance. It is highly recommended that the lamp's envelope not be touched. If there is any chance that there are fingerprints on the lamp's envelope, wipe the envelope with methanol using a lint-free tissue and allow to dry prior to installation.

e. Tighten the screws to install the new lamp and reconnect the plug to the connector.
f. Replace the front cover.
g. Reset the lamp counter as described in the user interface documentation.
h. Power up the lamp allowing ample time to warm up and reach operating temperature.
i. Perform intensity test per end-user company SOP's.