

CERmaUVS™

Ceramic PCB starboard for UV LEDs

Abstract

Use the full potential of your UV LEDs!

The ceramic starboard is designed to maximize the efficiency of UV LEDs with a highly reflective UV coating and excellent warmth spread. Perfect for prototyping and validation as well as integrated systems.

Our **CERmaUVS™** starboards feature a highly thermally conductive ceramic core made from Aluminum Nitride (>170 W/mK) with minimal capacitance and a highly reflective UV coating (>80% UVC-reflectivity).

The copper terminals are finished with a nickel gold layer to ensure easy solderability and resistance to oxidation.

We can supply custom sizes & LED footprints upon request

Typical applications

- Ink and paint curing (UV curing)
- Air, water and surface disinfection
- Odor control
- Medical and biomedical applications
- Counterfeit detection/validation (currency, driver's license, documents, etc)



Typical Characteristics

Part number	# LEDs	LED Footprint	Thermal Expansion (*)	Thermal Conductivity (*)	UV-reflectivity	Material
AINUVS-3535X1-0001	1	3535	2~3	>170	>80%	Core: Aluminum nitride Terminals: Nickel-gold over copper
AINUVS-3535X3-0001	3	3535	2~3	>170	>80%	

(*) Calculated values based on typical specification. Actual measurements may vary.

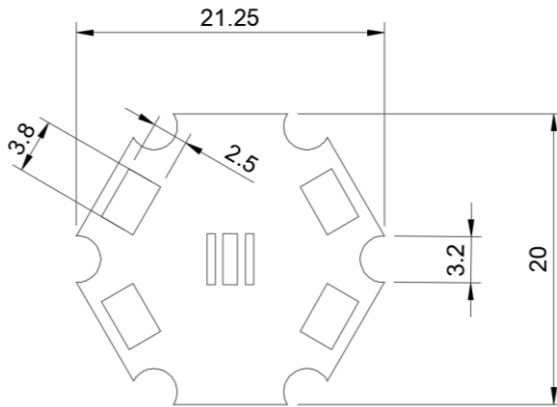
Thermal Expansion (CTE): ppm/°C

Thermal conductivity: W/mK at 20 °C

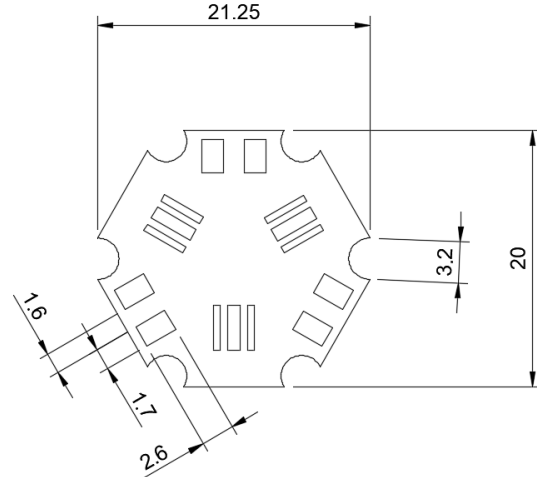
Physical data

Dimensional tolerances: Length x Width +/- 0.1mm – Thickness +/- 0.1mm

AINUVS-3535X1-0001 - 1 UV LED (3535)



AINUVS-3535X3-0001 - 3 UV LED (3535)

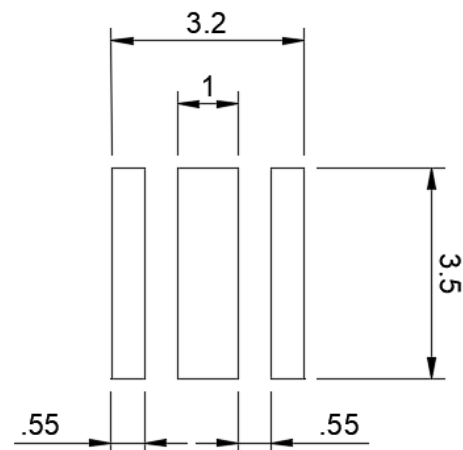


Matching LEDs

LEDs with the 1414 [3535 metric] footprint are solderable on this starboard PCB.

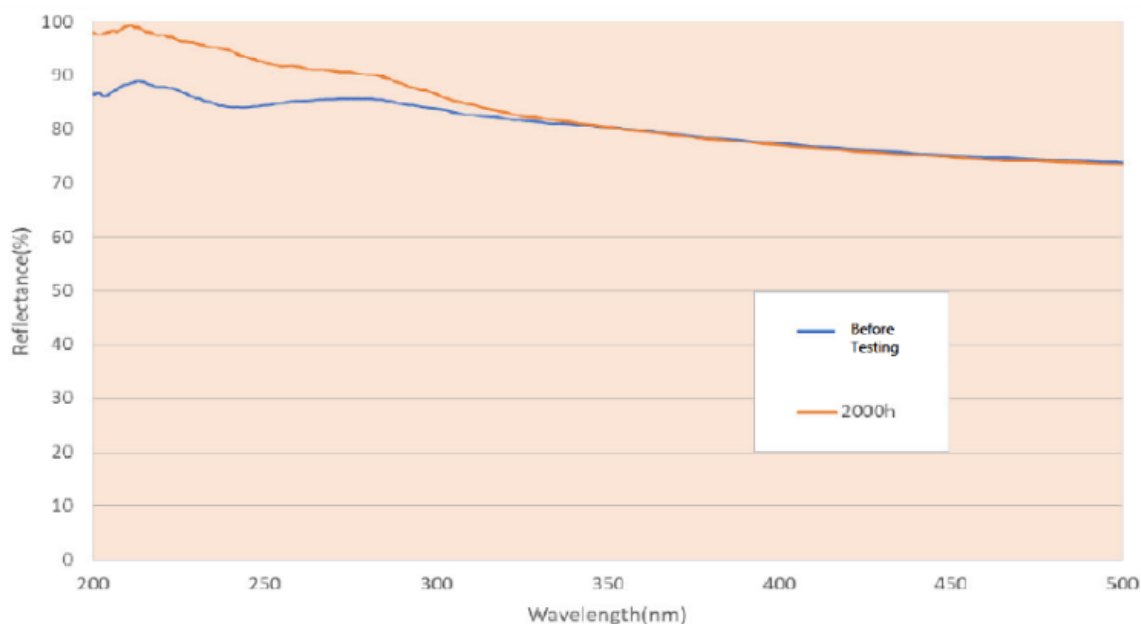
Some LED examples:

- CLH-N3S Crayo UV-C LED
- ELUC3535NUB 0.13W series
- ELUC3535NUB 0.7W series
- SU CULBN2.VC
- SML-LXF3535UVCC10
- XBT-3535-UV
- 15335339AA350 (WURTH ELEKTRONIK)
- 15335340AA350 (WURTH ELEKTRONIK)
- VLMU3511-365-130
- ...



Highly UV-C reflective coating

The CERmaUVS is equipped with a high reflective UV-C solder mask that reflects >80% in the UVC spectrum, preventing underperformance and degradation. The mask measured at 280nm a reflectivity of 85.7%, and after a 2000h irradiation test a reflectivity of 90.1%.



Installation & Packaging

- Easy installation with M3 screws
- Individual & custom packaging

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