



Sensor Electronic Technology, Inc

For immediate release

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Sensor Electronic Technology, Inc. UVTOP® Deep UV LEDs pass extreme environmental robustness tests to successfully complete space qualification

Columbia, SC, USA – November 24th, 2010 – Sensor Electronic Technology, Inc. (SETI), together with Stanford University and National Security Technologies (NSTec) of Livermore, CA, has demonstrated unprecedented environmental robustness and radiation hardness of its UVTOP® deep ultraviolet LEDs. Deep UV LEDs with peak emission wavelength of 255 nm have passed stringent space qualifications for large temperature variations and mechanical shocks with 27 cycles of 100K temperature cycles and 14g rms random mechanical vibrations. The forward voltage, emission spectra, and optical output power exhibited no significant changes after these harsh environmental tests.

The UVTOP® LEDs have been successfully tested against the requirements for deep space exploration such as the Europa Jupiter System Mission (EJSM), where they will be subject not only to severe thermal and mechanical shocks, but also high levels of radiation. Under irradiation up to 2×10^{12} protons/cm², the LEDs demonstrated extreme radiation hardness. UV LEDs have so far have exhibited high operational lifetimes in excess of 26,000 hours in nitrogen atmosphere, and 25,000 hours in vacuum, without significant power drop or spectral shift.

This extreme testing demonstrates the optical, electrical, and mechanical robustness of the UVTOP® LEDs is suitable for many space and terrestrial applications where conventional UV light sources are simply too fragile.

Solar-blind P-i-N photodiodes with a peak responsivity matching the UVTOP® LEDs at 255 nm were also manufactured by SETI and tested to the same stringent space qualifications. These detectors also exhibited extreme radiation hardness and retained 50% responsivity up to 3×10^{12} protons/cm² fluence.

About Sensor Electronic Technology, Inc.

SETI is the World leader in UV LEDs, and UV LED products and the World's only commercial manufacturer of UV LEDs shorter than 350nm in wavelength. Certified to ISO9001, we offer standard UVTOP® LEDs and UVCLEAN® LED lamps in wavelengths from 240nm to 365nm with DC optical output powers up to 50mW and can offer OEM customized solutions including LED lamps, light sources and complete systems.

For more information on SETI, please visit www.s-et.com or contact us directly on (803) 647-9757 or at info@s-et.com