

nanoGUARD

Unparalleled PCBA Protection

Advanced nanoGUARD™ coatings provide critical electronics applications with 3D protection from harsh electrical and environmental conditions.

actnano's proven nanoGUARD technology delivers unsurpassed performance, reliability and manufacturing efficiencies without compromise.

100% 3D coverage with nanoGUARD viscoelastic, gel-state material

- Horizontal and vertical surfaces
- Undercoat large components (BGAs, etc)
- Use on rigid or flexible substrates
- No cracking or bubbling

Waterproof exceeding IPX7/8+

- Protection from liquids, condensation, humidity, salt and more

Proven connect through coating capability

- No/minimal masking required
- Coat connectors and contacts
- Maintain high speed signal integrity connections

Coat heat sinks and antennas

- No RF influence
- Negligible thermal impact

Lowest total solution cost

- In-line processing, no cure time deposition
- No ovens or other curing required
- Use existing or standard equipment
- Typically, ready within 30-60 seconds
- Easy board rework and repair

Meets a broad list of environmental certifications and industry requirements

- UL94 V-0 and UL94 5VA flammability rating
- 100% safe materials
- Lower manufacturing carbon footprint



Contact Us:
info@actnano.com



www.actnano.com

nanoGUARD is electronics' best defense against harsh electrical and environmental conditions



PROVEN PERFORMANCE

Water protection:

IPX7/IPX8+

Humidity:

85C @ 95% RH @ 1,000 hours

Thermal Shock:

125 C/-40 C 1,000 cycles

Salt fog:

24-hr 72-hr, 96-hr, 200-hr
under 48V

Multiple chemical/fluid tests

Vibration testing

Submersion:

Water – 1 meter, 30 minutes

Saltwater (3.5% NaCL)
– 15 hours

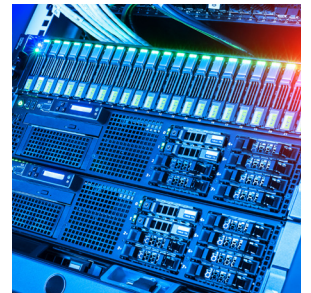
Soap water (1% soap solution)
– 15 hours

RF:

No signal attenuation up to 60 GHz
(exceeds 5G standard frequencies)

Electrical Contact:

No change within measurable
tolerance after mating



PROCESS ADVANTAGE

- Use existing equipment
- No ovens or other curing equipment required
- No masking or demasking
- Coat directly over connectors and contacts
- Fast ambient cure
- Undercoat raised components
- Withstands touching
- Easy and fast rework

 actnano

www.actnano.com