



## Application Guide

HS-900 series Nano-Ceramic Clears: (covers HS-900, HS-901, HS-902)

### Effectively expels Thermal heat rapidly to the surrounding environment

HS-900 is a single component Nano-Ceramic Clear Thermal Transferring Coating, that is electronically non-conductive and its surface highly hydrophobic, making it very resistive to moisture and water damage, increasing the reliability of electronic components.

HS-900 is a thin film free flowing coating that seaks out pin-holes and air-gaps around solder joints, components and composite boards so that all surfaces are protected from oxidation and moisture. HS-900 series coatings are ideal for coating circuit boards, their components and heat sinks, etc.

- For proper application of the HS-900 Nano-Ceramic Non-Stick coating material, the intended surface, (metals, composite or plastic), must be clean and free from oils, dirt and any other previous contaminants that may have been on the surface.
- HS-900 is normally used on surfaces where one application is all that is necessary to seal the surface. The coating may be applied by a spray method or a wipe-on or dip method over circuit boards and their component surfaces.
- Masking of board input and output connections is highly suggested.
  - **Step 1** -- Apply HS-900 in a manner (dependent on part shape & application method used), to cover all of the intended surfaces, being sure that there is a wet glossy, but thin (2-3micron) film on all the surfaces.
  - The HS-900 is to be applied at a dry film thickness of approxiamatly 2-3 microns.
- Allow the HS-900 to ambiently dry or dry to the touch, warm (not hot), free air flow will speed-up the drying process.
  - Once dry to the touch, the part may be stacked, packaged, assembled, tested, heated and/or handled without issue of bonding to other surfaces
    - (example; paper tissuse, bubble wrap/bags, etc.) -- (using some care not to scrap the coating from the surfaces).
  - Full ambient cure properties are obtained in approximately 12-24 hrs after application at room temperature.
  - **(NOTE - coating must be allowed to dry to the touch, pior to elavating the temperature).**
  - **\*\*Important Note!** – more is not better, if application techniques allow the HS-900 to become to thick or is heated hot, prior to being dry to the touch – the product may become sticky or gummy\*
    - \*In that case; to remove the sticky material, wipe-off with MEK, or other similar solvent.
  - The various 900 formulations, (percent of solids), offer several film thickness and levels of protection and heat dissapation.

Manufacturer is not responsible for the use and application of this material. It is up to the end user determine the suitability of this product for their own application. It is the belief that the contents of this document we- accurate at the time of printing. No warranty is written or implied regarding application and use.