

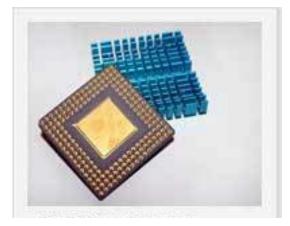
## S-Bond<sup>®</sup> 220 M

## Semiconductor & Electronic Component Joining

**Product Bulletin** 

SBT-SC-002 (Rev A)

S-Bond active solders have been developed to enable the joining of semiconductor materials in electronic packages. S-Bond alloys can join over a range of alloys from ~ 115°C up to 300°C. These alloys have been developed for optimum wetting and adherence to silicon, gallium arsenide (GAs), silicon carbide and a range of other semiconductors. These active alloys have patented additions of titanium (Ti) along with rare earth elements such as cerium (CE), and have small additions of gallium (Ga) to Sn and In-Sn alloys to activate the joining reactions on semiconductors, oxides and the metals. These elemental additions to the solders enable these



alloys to adhere to joint surfaces without the use of chemical fluxes or other metal plating. These attributes make S-Bond a universal joining solution for making electronic packages with various combinations of materials.

Examples of electronic packages include

- Thermal Lid Attachment for high power chips
- Heat spreader attachment to dies
- Light emitting diode attachment to heat spreaders
- Hermitic and EMI packages
- AIN and BeO heat spreader attachment

The alloys are a good choice when joining semiconductors to metals and ceramics since fluxes and plating are not required.

S-Bond Technologies provides joining services and engineering to integrate the joining processes into our customers production. Please contact us for a demonstration of the technology, prototype production and full production assembly.

See more products and services at:

http://www.globalspec.com/Supplier/Profile?vid=338809&Comp=4491