

New technology of non-metal materials welding

The technology allows to produce nodes of semiconductor devices of silicon-glass-silicon and silicon-glass type using electrostatic field of high voltage

FIELDS OF APPLICATION:

- Instrument Engineering
- Machine Engineering
- Medicine

MAIN FEATURES AND BENEFITS:

- production of welded joints of dissimilar materials in a solid phase of good quality with a significant differences in properties
- low level of residual stresses in the welding zone
- resistance of joints to mechanical shocks and vibrations
- resistance of joints to thermal shocks
- vacuum tightness of welded joints
- precision of welded units
- possibility to reduce welding temperature for 200 ... 250 K
- reduction of the products manufacturing cost in 3 times



TYPICAL WELDED STRUCTURES:



semiconductor
pressure detector

welded detector unit



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