PRESS-FIT TECHNOLOGY

Branded Products

Global Manufacturing
Engineered Solutions
Collaborative Design
PRESS-FIT TECHNOLOGY

As the industry pioneer, Autosplice offers Press-fit solutions that provide our customers with solderless, internally powerful, gas-tight connections. Press-fit Technology is available in a large variety of sizes, types and features and is compatible with high speed automation.

Press-fit connection relies on normal force, just like a contact system unlike soldered connection which relies on cohesive and adhesive strength of solder joint. Press-fit terminals are assembled onto PCB via high-speed insertion machines.

VERSATILITY
• Hundreds of tooled components in both soldered and compliant press-fit terminals
• Allows replacement of terminal in PCB
• Modularized tooling provides low cost product extensions
• Scalable insertion systems deliver cost efficient assembly solutions
• Global design, manufacturing and sales locations

VALUE
• Fast production process
• Compliant press-fit connection is less dependent on manufacturing process for reliability than soldered connection
• Provides a simple lead-free solution

RELIABILITY
• High normal force along with high retention force ensures reliable connection in automotive environments
• Eliminates wave soldering/eliminates screen paste solder
• Low contact resistance/reliable interface
• Improves product reliability
  a. No cold solder joints
  b. Eliminates solder flux contamination

APPLICATION OVERVIEW

PRESS-FIT TERMINALS
The “eye-of-the-needle” approach has been proven to provide the most reliable technology for optimizing both initial and on-going retention force. The spring-like design used in eye-of-the-needle configurations provides intimate long-term contact force against the barrel of the hole. All of Autosplice’s compliant pins, blades and sockets are provided in continuously reeled formats as either individual or multiple-position connector components for insertion by high-speed automatic machines.

INTEGRATED CONNECTOR MODULE
ICM incorporates robust press-fit terminals with precision molding and low cost flexible assembly technology. This product gives our customers the ability to design custom module enclosures with moisture sealing, mounting hardware and preinstalled connectors. Using our in-house manufactured press-fit terminals and precision metal stampings, reliability, quality and value are assured.

AUTOHEADER
Press-fit AutoHeader™ connector products are continuously molded and supplied in reeled format to be cut-to-size and for placement onto PC boards. Press-fit eye-of-the-needle terminations are available in a wide range of pin and blade sizes on different centerline spacings. Continuously reeled Autoheader product can be transformed into any make-to-order connector with the use of a programmable AutoTrim™ machine or adjustable Manual Cutter.

CUSTOM CONNECTORS
We design and build custom electro-mechanical interconnect devices, custom stamped contacts and lead-frames (straight, right-angle, or multi-bend configurations). We also produce round & square wire terminals, all of which can be insert molded, or pressed directly into a plastic header, housing, cap, cover, or module. We do our own in-house molding, stamping, and assembly work. Our vast assortment of molding and stamping equipment, coupled with our automation assembly technology assure the reliability and quality of your next project.
**TESTING**

Autosplice Press-fit eye-of-the-needle technologies have been extensively tested to assure compliance with a number of key industry requirements, including IEC 60352-5 2012-02 Edition 4.0, and have been approved by several Tier 1 automotive customers for global use.

Specific testing included vibration, thermal shock & thermal life, mechanical shock, insertion force, retention strength, humidity, current cycling and contact resistance. All interconnect designs consistently passed with no damage and/or conformance with specified parameters. (Complete test results are available upon request.)

**WHY CHOOSE AUTOSPLICE?**

- Successful implementation in automotive applications since 2004
- Well over one billion press-fit terminals sold, with no reported field failures
- Globally standardized design, tooling, and quality standards
- High-temperature applications up to 150°C
- Wide choice of insertion equipment
- Worldwide supplier to automotive industry