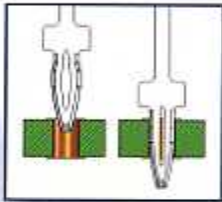


Automotive Press-Fit Technology Solderless Solutions



Connectors and Stacking Applications
Molded Sensor & Control Modules
Motor & Flapper Controls
Bus Bar Interconnects & Fuse Receptacles
Tire Pressure Monitors
Junction Boxes
Engine & Transmission Controllers

Interplex
Engineered Products
World Solutions in Precision Parts and Assemblies



Interplex's Press-Fit, Solderless Interconnect Technology is designed and tested to meet standard automotive requirements for vibration, mechanical & thermal shock for temperatures up to 125° C, as defined by the IEC, EIA and SAE.

This technology allows for the assembly of a terminal or electrical lead to a printed circuit board's (PCB) plated-through hole in such a way that an electrical mechanical connection is created and maintained without the application of solder.

Interplex's Press-Fit Solderless Technology Features:

- Solderless Technology design & tested to meet automotive requirements
- Proven "Eye of the Needle" design
- Qualified to 125° C operational temperatures with optional 150° C alloys available
- Requirements defined by IEC, EIA and SAE
- Designs available for both .64mm and .80mm thick press-fit sections
- High conductive material options
- Compatible with various PCB plating types



Press-Fit Sizes and Technology

Press-Fit Thickness	Alloy Options	Conductivity (IACS)	Nominal PCB Hole Size
<p>.64mm - Thick</p>	Phosphor Bronze → Tinned Brass →	13% to 15% 25% to 30%	* 1.020 mm
<p>.80mm - Thick</p>	Phosphor Bronze → Tinned Brass → High Conductivity Alloy →	13% to 15% 25% to 30% 75% to 80%	* 1.486 mm

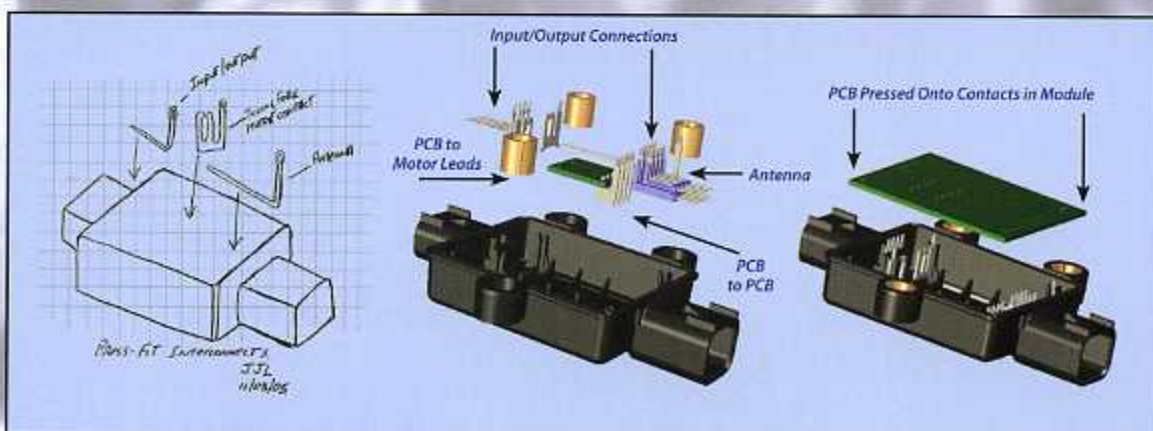
* Request "Application Drawings" for details and tolerances on PCB hole construction.



Press-Fit Technology Automotive Products

Advanced Engineered Press-Fit Solutions

The company's Advanced Engineering team works with customers to develop press-fit solutions for applications such as discrete terminals and connect or assemblies, as well as custom-molded packages and specialized assemblies. In addition, Interplex leverages its expertise in product design, applications engineering, manufacturing and automation to help customers create the proper turnkey solution for any particular application.



Concept → **Design** → **Prototype** → **Production**

In addition, the company can leverage its global manufacturing resources to meet any regional manufacturing or automation requirements.

Summary Results of Mechanical and Environmental Tests

Test Item	Acceptance Criteria	Testing for:	Result
.64mm Insertion & Retention Force	97N-Insertion-Max. 20N-Retention-Min.	• Forces in Upper & Lower Limit Hole Sizes	Pass
.80mm Insertion & Retention Force	178N-Insertion-Max. 62N-Retention-Min.	• Forces in Upper & Lower Limit Hole Sizes	Pass
PTH Integrity	Per IEC 60352-5	• Deformation of Plated Through Hole	Pass
Random Vibration	Increase of Contact Resistance < 3.0 mΩ Per IEC, EIA, SAE	• Movement of Contact Points	Pass
Thermal Shock		• Movement of Contact Points	Pass
Thermal Aging		• Stress Relaxation of Terminal and PCB	Pass
Temp/Humidity Cycle		• Growth of Oxide Film	Pass
Mixing Flowing Gas		• Growth of Oxide Film	Pass
		• Effectiveness of Barrier Plating	Pass

Detail Test "Summary Reports" Available on Request

Interplex is a vertically integrated global manufacturer of small precision parts and assemblies with over 25 worldwide locations in 10 Countries. Interplex offers complete solutions from concept through development and into scalable high volume production for almost any application requirement. Press-Fit sections can be designed into discrete metals stampings, molded and overmolded shrouds, housings and assemblies and/or incorporated into complete electronic and mechanical sub-assemblies.





Interplex Global Locations







Americas

-  California: Interplex Nascal
- Connecticut: Interplex Technologies
- Florida: Interplex Proto-Stamp
- Florida: Interplex Sunbelt
- Illinois: Interplex Daystar
- Kentucky: Interplex Plastics
- Massachusetts: Interplex Etch Logic
- Massachusetts: Interplex Metal Logic
- Michigan: Interplex Engineering Center
- New Jersey: Interplex NAS
- New Jersey: Interplex Precision Machining
- New York: Interplex Industries, Inc.
- Ohio: Interplex Medical
- Rhode Island: Interplex Automation
- Rhode Island: Interplex Engineered Products
- Rhode Island: Interplex Metals
-  Mexico: Interplex Mexico

Europe

-  France: Interplex Soprec
- France: Interplex Microtech
-  Germany: Interplex NAS GmbH
-  Hungary: Interplex Hungary
-  Scotland: Interplex PMP

Asia

-  China: Interplex Electronics (Dalian)
- China: Interplex Electronics (Hangzhou)
- China: Interplex Stewart EFI
-  India: Interplex Electronics India
-  Korea: Interplex Quantum
-  Malaysia: Interplex Electronics Malaysia
-  Singapore: Interplex Singapore