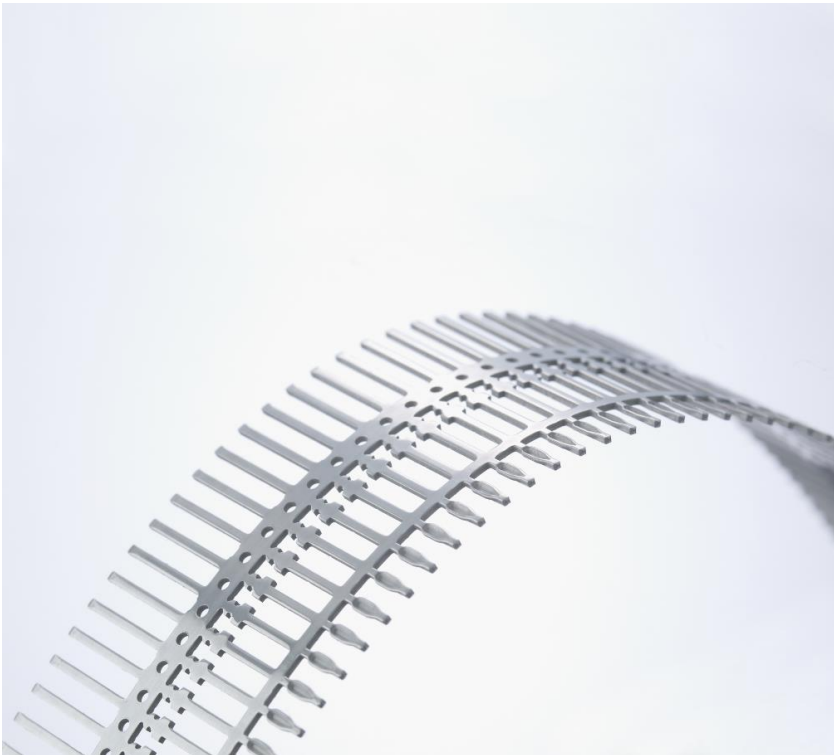


Success with Press-fit: Growing Demand



Picture: LUMBERG Press-fit Contacts

Our press-fit venture is the response to the market's call for solderless electrical connections of components with printed circuit boards that are shockproof and vibration-resistant, yet space-saving and highly dependable (0-ppm target).

The many requirements from a large variety of applications within the automotive industry as well as other fields in electronics have led us to respond by expanding press-fit technology in our product spectrum. This innovative, solderless electrical connection defines the plasticity around the press-fit zones of the contact male by press-fitting them into the PCB's metallized casing. This sealed, non-aging connection eliminates corrosion and guarantees high mechanical stability. With improved FIT (Failure-in-Time) ratings of up to 30 times, this technology creates design opportunities and high packing densities for many automotive applications. The solderless method not only erases soldering costs: additionally, the PCB as well as adjacent components are no longer exposed to the stress caused from the high temperatures associated with soldering.

CuSn press-fit contacts with tried & tested pin geometries have been available on the market for years and come in material thicknesses of 0.6 mm and 0.8 mm. During press-fitting, they form an extremely dependable connection between the press-fit contact of a sub-assembly or connector with the FR4 PCB up to 1.6 mm. As defined in the IEC 60352-5 standard, the result is a large contact surface with multiple cold weldings between the

press-fit contact and the metallized casing. Not only do they support an optimal electrical contact, they also create a mechanically durable connection. Lower press-in forces with simultaneously high push-out forces guarantee a multitude of applications for multi-layer printed circuit boards.

Naturally, we can integrate the punched press-fit contacts into a large variety of production methods for mechatronic sub-assemblies which we custom-design and produce.