

Implantable Hermetic Feedthrus

Configuration Options

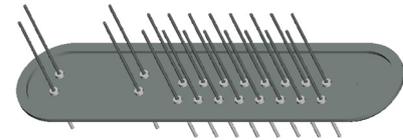
Miniature Implantable Headers

The Hermetic Solutions Group's ceramic sealing technology is the solution of choice for producing implantable headers that must fit inside very small spaces, so designers can group families of pins where they need them, in headers that fit their design. Our technology can usually be adapted to the space available.



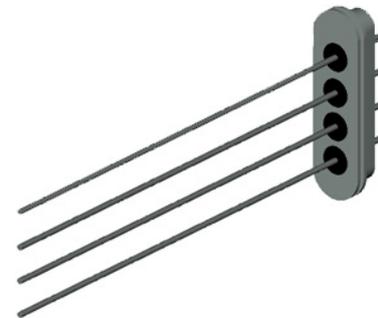
Implantable Multi-Pin Feedthrus

Our implantable feedthrus are constructed with platinum/iridium pins sealed with titanium bodies with our field-proven ceramic sealing technology Kryoflex®. This material combination is the solution of choice for producing custom headers with high pin counts.



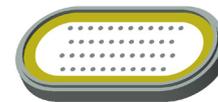
Implantable Filtered Feedthrus

Size is a critical consideration when designing implantable components. The Hermetic Solutions Group can integrate very small multi-layer ceramic discoidal capacitors into hermetic implantable electrical feedthrus. Thanks to its unique manufacturing process, the Hermetic Solutions Group can install these capacitors on the individual feedthru pins when required.



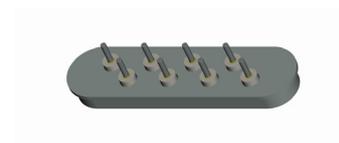
HTCC Feedthrus

For applications that require a thin, high-density connector with a small footprint, the Hermetic Solutions Group can manufacture feedthrus that use High Temperature Co-fired Ceramic circuit boards hermetically sealed into a titanium frame. The example to the left is a rendering for a part that is 0.050" thick and .5" wide and contains 46 pads.



Pre-Designed, Quick-Turn Options

The Hermetic Solutions Group also offers a series of standard implantable medical feedthrus that are quick-turn and provide the same great levels of performance and reliability as our custom solutions. These feedthrus are available with 1 and 4 pins in a circular shapes and 2, 3, 4 and 8 pins in oval shapes.



Technical Advantages

Flexibility

Our unique manufacturing processes and materials allow us to create ultra miniature implantable feedthrus in complex shapes.

Field Proven Materials

Connectors from the Hermetic Solutions Group that feature titanium bodies and platinum/iridium pins have been successfully implanted for decades.

Design History

We have been making implantable devices in volume for over 40 years.

Design and Development Flexibility

Complex shapes can be easily realized without the need for elaborate and expensive mold tooling. Our expertise in titanium machining enables us to effectively produce a wide variety of geometries. Need to move a pin? A simple engineering change and programming change and the next version is ready. No complex mold tools to scrap.

Better Standoff Distances

Our pins are sealed into headers using our Kryoflex ceramic sealant - an excellent insulator. We can support pin pitches down to 0.30".

Transparency: Prototypes to Production

Our prototype parts are identical to the final production parts. Need 50 parts to start your qualification process? No problem. You can start qualification testing with these parts with assurances that future parts will be identical. Other technologies use different production strategies depending on volume, so testing performed on low volume samples may have to be redone for larger volume production parts produced with different methods.

Hi-Rel Alloys Division

6934 Kinsmen Ct
Niagara Falls, Ontario
Canada, L2H 0Y5
289-296-4078

Litron Division

207 Bowles Road
Agawam, MA 01001
866-548-7661

Hi-Rel Lids Division

Fuller Road
Harleston, Norfolk
IP20 9EA UK
+44(0)1379-853944

PA&E Division

434 Olds Station Road
Wenatchee, WA 98801
855-285-5200

Hi-Rel Products Division

16 Plains Road
Essex, CT 06426
860-767-9031

Sinclair Manufacturing Division

PO Box 398, 12 South Worcester St.
Chartley, MA 02712
508-222-7440