

Implantable Hermetic Feedthrus

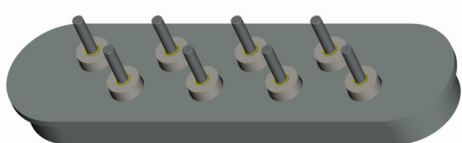
Overview

PA&E, a Qnnect company, provides ceramic sealing technology that is an extremely effective solution for producing implantable headers that must fit inside very small spaces. It allows designers to group families of pins where they need them, in headers that fit their design. Our technology can usually be adapted to the space available.

Our implantable feedthrus are constructed with platinum/iridium pins sealed into 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.

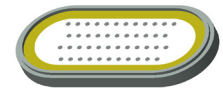
Implantable Filtered Feedthrus

Size is a critical consideration when designing implantable components. PA&E can integrate very small multi-layer ceramic discoidal capacitors into hermetic implantable electrical feedthrus. Thanks to its unique manufacturing process, these can be installed on the individual feedthru pins when required.



HTCC Feedthrus

For applications that require a thin, high-density connector with a small footprint, PA&E can manufacture feedthrus that use High Temperature Co-fired (HTTC) circuit boards hermetically sealed into a titanium frame. The example above is a rendering for a part that is 0.050" thick and .5" wide and contains 46 pads.



Pre-Designed, Quick-Turn Options

PA&E 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.



For More Info:
qnnectnow.com
info@qnnectnow.com

Flexibility

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

Design History

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

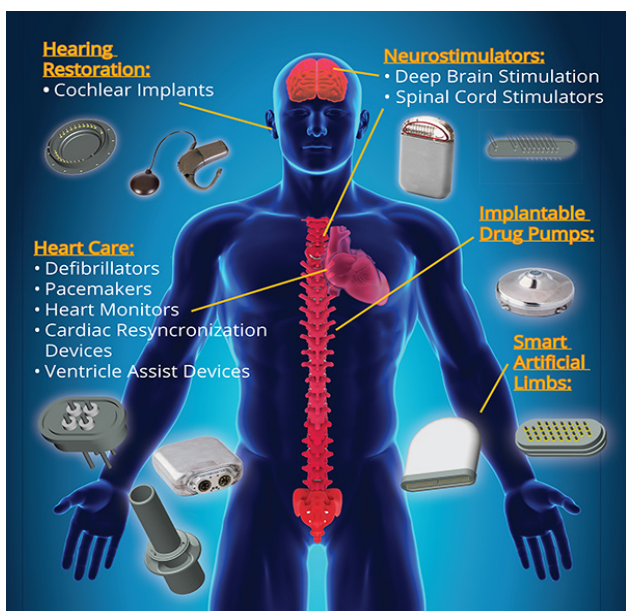
Field Proven Materials

Connectors from PA&E that feature titanium bodies and platinum/iridium pins have been successfully implanted for decades.

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".

Implantable Applications Supported



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.

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.