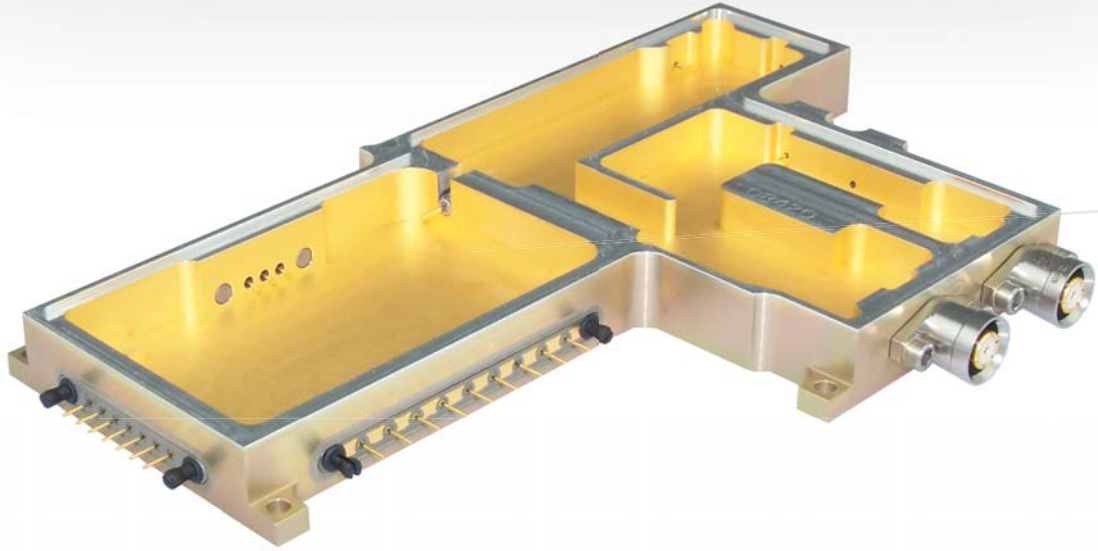


Integrated Electronic Packaging



Integrated Hermetic Electronic Packaging

PA&E specializes in the design, manufacture and integration of ultra-rugged, light-weight hermetic electronic packaging for use in extreme environments. Our laser-weld construction eliminates a key point of failure: solder joint fatigue.

Turn-Key Solutions ■ DC/RF microwave connector integration

Reliable ■ Laser weld construction

Thermally Conductive ■ Heat sink integration

Flexible Solutions ■ Specialists in custom configurations



Integrated Electronic Packaging



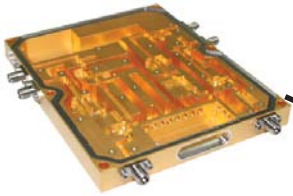
Rectangular DC Connectors and Feedthrus

- Weldable to Aluminum, Titanium & Iron/Nickel Alloys
- Insulator: Kryoflex® Polycrystalline Ceramic
- Pin Material: Beryllium Copper 172/173
- Pin Finish: Nickel/Gold Plated



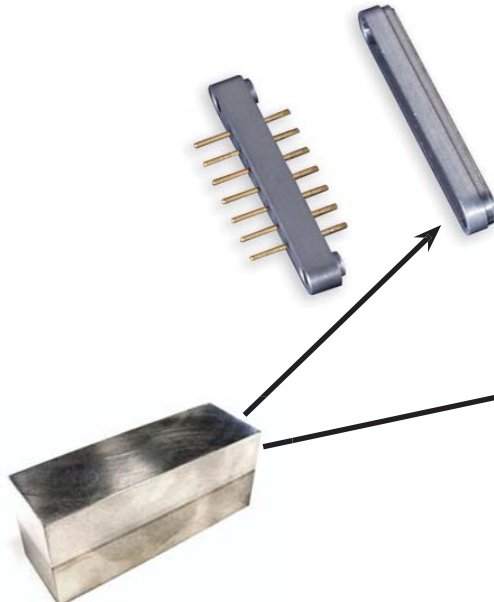
Wave Guide Windows

- Weldable to Al Ti & Iron/Nickel Alloys
- Corning Glass



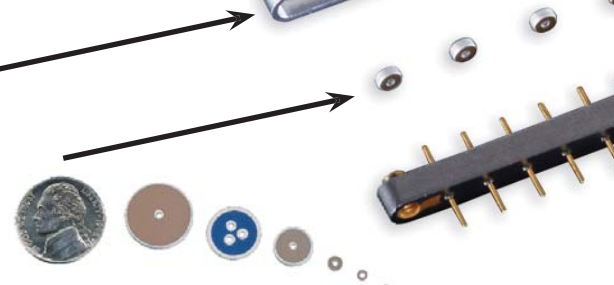
Precision Machining & Metal Finishing

- World-Class CNC Machining Capabilities
- Close Tolerance Milling, Turning & Engraving
- Wire EDM/Precision Water Jetting
- Aluminum, Titanium and Iron/Nickel Alloys
- Plating, & Painting Facilities



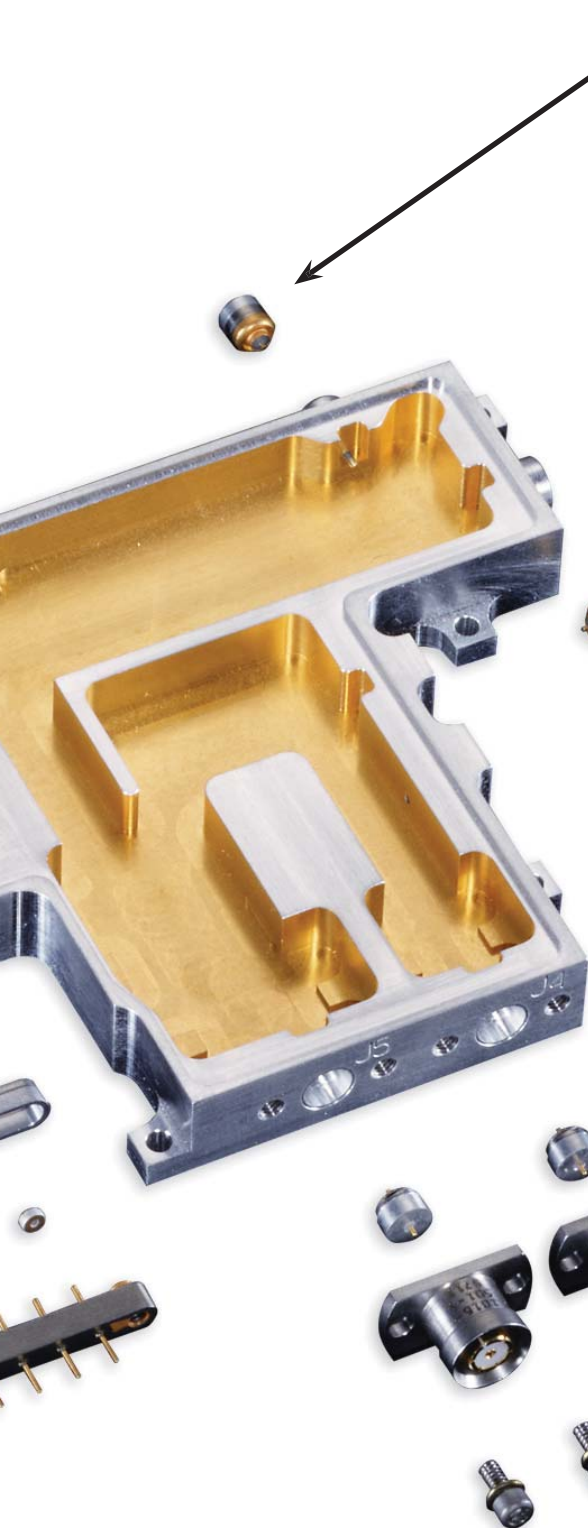
Explosively Bonded Metals

- Ferrous to Non-Ferrous Transitions
- Layers Bonded at the Atomic Level
- Eliminates Inter-Layer Galvanic Corrosion



EMI/RFI Integrated Discoidal Capacitors

- Temperature Coefficients: NPO, BX, X7R and Z5U
- Outside Diameter: .040" to 1.100"
- Capacitance Values: 5pF to 5µF
- Voltage Ratings: up to 500 VDC



RF/Microwave Thread-In Connectors

- Weldable to Aluminum, Titanium & Iron/Nickel Alloys
- Insulator: 7070 Corning Glass
- Finish: Nickel/Gold Plated
- Interface: IAW MIL-STD-348
- Performance: IAW MIL-PRF-39012
- Impedance: 50 Ohms

RF/Microwave Push-On Connectors

- Weldable to Aluminum, Titanium & Iron/Nickel Alloys
- Insulator: 7070 Corning Glass
- Finish: Nickel/Gold Plated
- Interface: IAW MIL-STD-348
- Performance: IAW MIL-PRF-39012
- Impedance: 50 Ohms

RF/Microwave Flange Mount Connectors

- Weldable to Al, Ti & Iron/Nickel Alloys
- Insulator: 7070 Corning Glass
- Finish: Nickel/Gold Plated
- Interface: IAW MIL-STD-348
- Performance: IAW MIL-PRF-39012
- Impedance: 50 Ohms

Laser Welding Eliminates Solder Joint Fatigue ...
Forever!



Hermetic Solutions for Extreme Environments

Ceramic EMI Filters



PA&E's military-qualified Filter Products Group specializes in the design and manufacture of high-reliability low-pass EMI filters. Utilizing multi-layer ceramic discoidal capacitors and ferrite inductors, PA&E's engineering staff are experts at designing EMI filtering solutions for electronic circuits operating in hostile EMI environments. In-house manufacture and testing, in accordance with MIL-PRF-28861, Class B (QPL) and PA&E class H, are standard practice.

DC Connectors



PA&E's hermetically-sealed rectangular DC connectors exceed most mil-spec requirements and are designed for use in military and commercial applications, where environmental conditions require an extremely rugged and reliable hermetic seal. The uniquely-controlled CTE characteristics, chemical bonding properties and polycrystalline structure of Kryoflex allows PA&E to manufacture these hermetic connectors with 304L stainless steel shells and gold-plated beryllium-copper contacts to maintain excellent electrical performance and environmental characteristics.

RF/Microwave Connectors



PA&E's 50 Ohm hermetic RF/Microwave connectors are designed for use in military and commercial applications where environmental conditions require an extremely rugged and reliable hermetic seal. Low-loss Corning 7070 glass is used for dependable electrical performance. PA&E manufactures these hermetic RF connectors from a variety of compatible shell and contact materials, in both laser weld and solder-in styles, which provide excellent electrical and environmental performance characteristics.

Bonded Metals



PA&E has been the innovative leader in the explosive metal working field for over 30 years. Our customers have access to some of the world's most exciting metal working technologies, such as: Explosive Metal Bonding, Explosive Metal Forming, Explosive Shock Hardening and Dynamic Powder Metal Compaction. These high-strain rate technologies offer unique metal working advantages that can help our customers achieve the impossible.

For further information contact us at sales@pacaero.com
or visit our web site www.pacaero.com

