



Hermetic Solutions

Innovative Interconnect Solutions



SRI Hermetics, a division of Winchester Electronics, was founded on the principle of using advanced engineering and material science to create the world's leading hermetic electrical connectors and electronic packaging solutions.

Hermetic Seal Advantage

- A hermetic seal is more than air tight and is designed to keep any damaging particles from infecting the outside environment or the function of electronic equipment.
- This seal lasts up to 20 years, whereas an epoxy can become defective in less than 2 years.

Hermetic Connectors, Feedthroughs & Packaging

- Hermetic capabilities are compatible with multi-pin connector (Circular, Headers, Nano, Sub-D, Micro-D) and coaxial connector types (SMP, SMPM, SMA, SSMA, TNC, DC Single Pin) which are all customizable based on your needs.
- SRI also has multi-pin feedthroughs for vacuum applications: all connectors and RF feedthroughs can be laser welded into flanges or fittings in any material or configuration.
- Integrated packaging can be made out of any material and any combination thereof.



Dust Free Applications



Harsh Environment Applications



Extreme Temperature Applications

Hermetic Seal Types

Ceramax Seal

- Ceramax is a patented phase changing compound that provides superior hermetic reliability and outstanding electrical performance with an operational temperature range of -269C to +450C.
- Effective for products with an electrical performance that is less than 2 GHz.
- Ceramax seals are compatible with high expansion metal alloys giving SRI Hermetics the ability to seal copper alloy contacts into connector shell materials not possible with competing technologies.
- Aluminum, titanium and high expansion stainless steel alloys are just a few of the shell materials available.

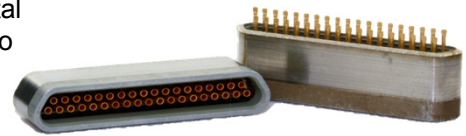
Original Glass Seal

- Glass feedthroughs are particularly useful for high frequency match impedance connectors due to the crystalline amorphous properties of the glass which promote low loss signal transmissions.
- Effective for products with an electrical performance that is greater than 2 GHz.
- Effective and reliable, yet fragile, seal.
- Compatible with iron alloys.

Unique Hermetic Metallurgy

Explosion Welding

- A solid state process that uses chemical explosives to accelerate one metal into another at a high velocity to create a welded interface between the two metals.
- Creates bonds between metals that cannot necessarily be welded by conventional means.



Vacuum Brazing

- A joining process whereby a filler metal is heated to its melting temperature above 450C and distributed between two or more base materials while protected by an oxygen free (vacuum) atmosphere.
- High density, oxide free joints are created between the parent materials.
- Materials that cannot be bonded using other brazing processes are joined.



Laser Welding

- A non-contact welding process that creates fusion and is ideally suited for assembly and integration of hermetic connectors due to its precise application and small heat affected zone.
- Very small connector components can be joined together and connectors can be mounted into higher level assemblies without distortion or damage.



Certifications

Certification	Description
AS 9100	Aerospace Quality Management System
IPC/WHMA-A-620 (Class 3)	Requirements and Acceptance Standards for Cable and Wire Harness Assemblies
ISO 9001:2008	Quality Management Systems
ISO 14001:2004	Environmental Management System

WINCHESTER

KINGS

CCC

Cadillac

BOMAR

SRC
HAVERHILL

TRU

SRI
HERMETICS

SOURCE
TECHNOLOGY

Winchester Electronics
203.741.5400 Phone
203.741.5500 Fax
www.winchesterelectronics.com

Follow us on:   

