A PIONEER IN CERAMIC AND HERMETIC COMPONENTS

SEMICONDUCTOR MANUFACTURERS face a series of challenges, such as aggressive production schedules, pressure to control costs, and continual demands for innovation. CeramTec supports your manufacturing efforts with ceramic components and hermetic products that are able to withstand extreme environments and heavy use.

CeramTec pioneered the science of ceramic-to-metal sealing and remains the leading innovator in ceramic-to-metal sealing technology. Hermetically sealed electrical and optical components such as feedthroughs and multipin connectors are built to endure extreme conditions, whether it be an ultra-high vacuum (UHV) environment (1 x 10^{-10} ATM • cc/sec He), temperatures ranging from cryogenic (4 K) to 450°C, pressures in excess of 25,000 psig, corrosive or caustic environments, while maintaining an unsurpassed level of reliability and performance. CeramTec also offers expertise in the production of multilayer actuators that meter gas flow into semiconductor process chambers.

For universities and research facilities, CeramTec offers a comprehensive catalog of standard components for "vacuum chamber" applications, including coating chamber applications, semiconductor process chamber applications or simply a research lab vacuum chamber application.

CeramTec
THE CERAMIC EXPERTS

PRODUCTS

- Power feedthroughs
- CeramCool®
- Substrates (alumina/AIN)
- Multipin feedthroughs
- Instrumentation feedthroughs
- Multilayer piezo actuators
- Thermocouple feedthroughs

APPLICATIONS

- PVD/CVD chambers
- Ion implantation equipment
- Ion sources
- PV deposition equipment
- Mass flow meters
- Power source for instrumentation devices

CUSTOMER SERVICES

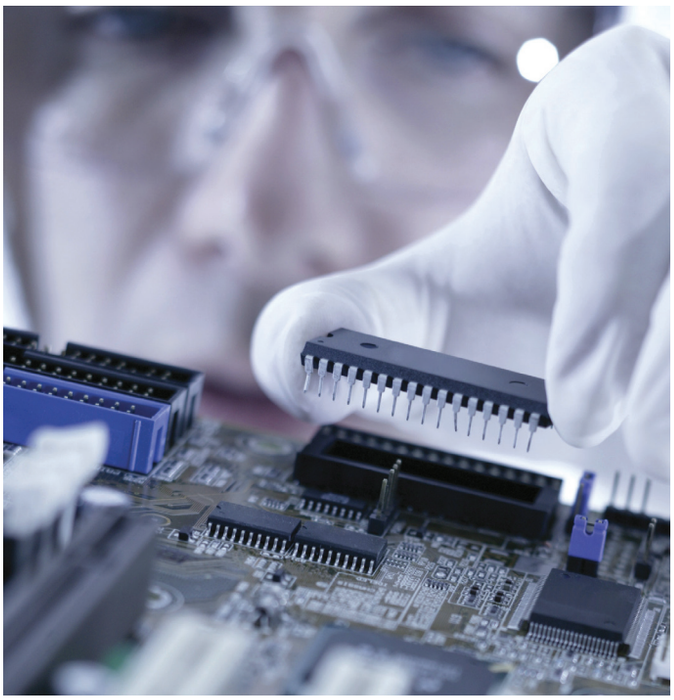
- Technical design assistance for custom product
- Technical sales force
- Prototyping to full production capabilities
- Standard offering/catalog offering
- Custom product offering
- FEA design analysis
- Fully integrated manufacturing of ceramics and hermetics

MATERIALS

- Ceramic-to-metal seals
- Glass ceramic seals
- Glass seals
- Piezo electric materials and assemblies
- Silicon matrix-silicon carbide
- Aluminum nitride

BENEFITS OF PRODUCTS

- Hermeticity for ultra-high vacuum (UHV) applications
- Diverse product offering
- Excellent chemical resistance
- Excellent electrical properties
- High temperature resistance
- Low particulate generation
- High purity



YOUR TOTAL RESOURCE

CeramTec is your total turnkey resource for ceramic and hermetic products. Whether providing standardized parts, building to your specs or working as an extension of your design team, we provide a service-oriented culture that is committed to making sure that you have components that meet your budget, your schedule and your specifications.

INFORMATION

For additional information on advanced ceramic and hermetic components for Semiconductor and UHV applications, contact us at **sales@ceramtec.com** or call **1-864-682-3215.**

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