

Custom Electronics, Inc., established in 1964, is a globally recognized manufacturer of top guality Mica paper capacitors and tailored high-voltage assemblies. Our products are widely used throughout the military, commercial and industrial markets. Outstanding workmanship and quality standards have made our name synonymous with the terms dependability, reliability and high-performance.

## \*\*\*\*AS9100/ISO9001 CERTIFIED\*\*\*\*

\*\*\*\*\*\*\*\*\*\*\*Certified ANSI/NCLS Z540-1, MIL-I-45208, J-STD-001, MIL-Q-9858, Upon Request: RoHS Compliant



OUR TAILORED SOLUTIONS ...

#### **CUSTOM CAPACITORS**

We offer single and multiple capacitor packages with a variety of terminations, mounting and encapsulating options to meet your specific design requirements.

We design for applications with temperature variables as high as 260 °C to as low as cryogenic. Bare caps, wrap and fill, molded and box encapsulated options are available.



#### Every product we manufacture passes through one of the toughest Quality Control Systems in the industry. We strive to continually improve the quality of our products and have ensured that our engineering and manufacturing procedures conform to the highest level of standards.

# Reliability, Quality & Customer **Satisfaction**



#### INTEGRATED ELECTRONIC ASSEMBLIES

We are High-Voltage Encapsulating experts utilizing numerous epoxy and silicone systems to provide you with the best solutions for your specific needs. From dividers & multipliers to post regulators and many other high voltage packages, we are accustomed to designing in tight spaces with odd shapes so that we can package your High-Voltage components into a reliable module allowing you to just drop it into your system.

#### SINGLE and MULTI-LAYER BUS BARS

Our bus bar division specializes in the manufacturing of custom designed multilayer bus bars for use in military and commercial systems. Applications include, but are not limited to: e-drives, converters, high-energy distribution and renewable energy applications.









### Capabilities...

Being a *world leading high-voltage mica capacitor and high-voltage assembly manufacturer for more than 40 years*, we have developed a long list of capabilities, which allow us to produce some of the most reliable High-Voltage products available! We're confident we have the experience and know-how to meet your design needs. Here are only a few examples that help **set us apart** from our competitors:

#### **3D-CAD (Computer Aided Design)**

CEI utilizes **SolidWorks** solid (3-D) modeling software. The use of 3-D modeling software dramatically **shortens the design cycle** and reduces fabrication errors. If you wish to supply an existing solid design to have quoted for production, please use IGES, STEP or native SolidWorks file formats.



### Celebrating 45 years in the Commercial & Military Electronics Industry

#### 3-Dimensional Printing (Fused Deposition Modeling)

Nothing communicates design ideas better than a Functional 3D model. They enable the designer to make informed decisions resulting in: 1) Fewer design changes, 2) Better product designs and 3) Lower overall cost. Our 3-D FDM capability will bring your CAD files and design ideas to life allowing you to test form, fit and mechanical function earlier in the design process than ever before!



#### Large Scale Vacuum molded Encapsulation

Another *unique strength* is our ability to mold specialized epoxies into large scale and highly detailed shapes. With more than 120 years combined experience, our mold engineers have developed some of the most complex molds imaginable. If you have an HV Module or Bus-Bar Assembly requiring dependable high-voltage barriers, threaded inserts, special terminations or mountings, *we have the best way to do it!* 

#### **Electrical and Environmental Testing**

~*CEI* has continually increased its test capabilities to accommodate a wide variety of electrical and environmental test requirements.

- Partial Discharge to 20kVac
- Dielectric withstanding voltage to 75kV
- Insulation Resistance & Leakage
- Semiconductor Dynamic Testing (Switching)
- X-Ray
- Temp/Humidity up to 90% Rel Humid.
- Simulated High Altitude Testing to 70,000ft
- Thermal Cycling & Thermal shock –65 ℃ +125 ℃

#### **Related Services**

- Customer design assistance and teamed co-design
- Manufacturing per customer's specifications
- Prototype, short run and low to high volume mfg.
- Comprehensive electrical and environmental testing

Plasma Etching, Capacitor Winding, High Voltage Soldering and Assembly, Ink Jet Marking, Prototype Development and MUCH MORE!

GO TO: <u>www.customelec.com</u> to see the list for our STANDARD product line! High Voltage DC Filter/Storage: KMS Series EFI/EBW Capacitors: XKH & XKM Series 175° High Temp Cap: CKR Series



