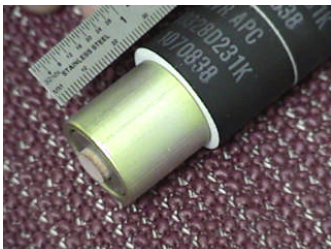


- **Extreme Energy, Power, Voltage**
- **Engineered to Your Needs**
- **Rapid Design Turnaround**

When your application demands extremes of voltage, energy or power, our Custom Resistor Assemblies may be the answer. We integrate our High Power Disk resistors into multi-disk assemblies, engineered to meet your requirements; energy to megajoules, average power to hundreds of kilowatts, and voltage to hundreds of kV!

Employing a wide range of stock and pre-engineered components and techniques, we quickly package an economical solution to your tough resistor applications in voltage clamping, capacitor charge and dump, high power snubbers and high voltage pulsed power. Assembly voltage and energy surge ratings are the sum of the individual disk ratings. See our High Voltage Disk data sheet for ratings and available geometries.

**“I” Series Compact Assemblies**

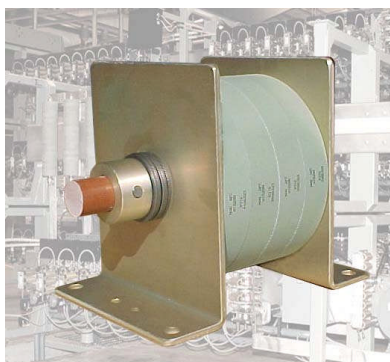


Applications for high voltage or energy surges in the range of tens of kilojoules at low average power are the domain of the “I” Series, ferrule-end stacks. These integrate up to twenty 32mm or 50mm disk resistors in series to create a single, reliable and economical component. Several styles of ferrule terminations provide a clean profile suitable for high voltage and interface easily to our high voltage endcaps for termination and mounting.



**“J” Series Large Assemblies**

“J” series stacks employ heavy-duty components for mechanical mounting, electrical isolation and termination. These



units combine up to twenty-five of our 75mm, 112mm, or 152mm disk resistors in series, yielding ratings to thousands of kilojoules of single-surge energy! Pre-engineered termination options include tab, cable or bus bar interface. Coating options optimize performance in air, liquid, or gas dielectric.



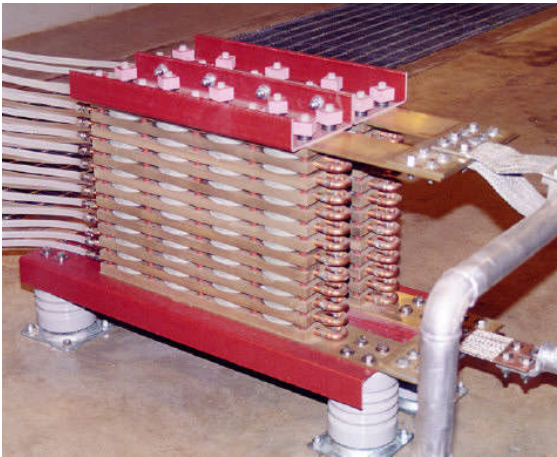
### **“K” Series Convection-cooled Assemblies**



The “K” series integrates metal fins into the disk resistor stack to improve forced or free-air convection cooling, obtaining a higher average power rating. This technique also reduces cool-down time in crowbar or dump applications when repetitive operation is a requirement.

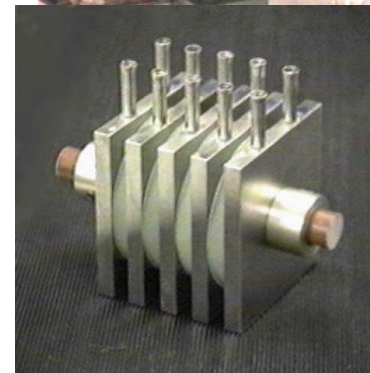
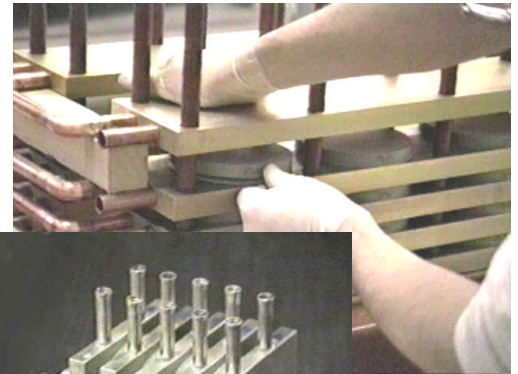


### **“H” Series Liquid-cooled Assemblies**



The “H” series use liquid cooling to achieve surge duty at very high average power. Our special techniques and materials for disk-to- heatsink interface achieve high power density at a low cost-per-kilowatt.

With typical power density of 500 watts to 3kW per disk, arrays can be configured in series/parallel arrangements to hundreds of kilowatts!



### **Unique Solutions**

Your unique resistor problem demands a unique solution! When the application calls for extreme combinations of surge energy, peak power, high voltage or minimum inductance, a custom-engineered solution based on our High Voltage Disk resistors can provide the compact, economical answer. Our engineering team has unmatched experience and thorough understanding of high voltage and high energy resistor applications. We've provided hundreds of custom solutions like the ones you see here, to designers of **traction drives, power quality equipment, industrial AC and DC motor drives, switchgear and pulsed power systems**. Drop your tough, high-energy resistor problem onto our design team. Let us put our experience and our pre-engineered Ceramic Resistor components to work for you!

