

A Quick Look at Our Products

Surge Suppression Incorporated[®] manufactures and supports a broad line of transient voltage surge suppression devices (TVSS), which are primarily intended for use in industrial, commercial, government and military applications. Our products incorporate our field proven, proprietary, electrochemical encapsulant. The encapsulant facilitates the transfer of thermal energy from the protection circuitry and stabilizes the thermal operating environment within the TVSS. Surge Suppression Incorporated[®] products do not suffer from the environmental and thermal effects of a non-encapsulated TVSS, even after handling many years of transient activity.

The Surge Suppression Incorporated[®] Design Approach

Surge Suppression Incorporated[®] utilizes specially selected electronic components in field and laboratory proven TVSS designs. These designs are specifically tailored for the protection requirements of the application and the transient environment. Heat is the enemy of all electronic components and circuits. Our TVSS protection circuitry is encapsulated in a special chemical compound. This arrangement for electronic components and the encapsulation system is known as a Hybrid Network. The chemical compound acts like a heat sink and enhances the transfer of the damaging heat produced by normal TVSS operation away from the heat sensitive electronic components. Since the thermal energy produced by transients is transported away from the protection circuitry, the electronic circuits operate in a cooler and more temperature stable environment. This reduces the thermal breakdown and deterioration of the protection circuitry occasioned by heat buildup and thermal cycling. Surge Suppression Incorporated[®] devices have a number of outstanding qualities. Some of these qualities are listed below:

- Ability to withstand numerous sequential surges without degradation or breakdown
- Outstanding resistance to heat induced degradation and failure
- Superior resistance to thermal cycling fatigue (expansion and contraction) failures
- Stable and tight nominal clamping levels
- Exceptional sine wave tracking performance and EMI/RFI filtering as a side effect
- Rapid automatic response with low surge remnant voltages (let-through voltages)

Our Product Credentials and Performance

Documented tests of Surge Suppression Incorporated[®] devices have been performed by numerous entities including Underwriters Laboratories. Surge Suppression Incorporated[®] devices are appropriately UL1449, UL1283 and CUL Listed as Transient Voltage Surge Suppressors. Our products also carry the CE mark for European markets. They are field proven and are used by organizations large and small, as well as the United States Air Force, United States Navy, and United States Army. All can attest our products' superior quality and performance.

Lightning Protection

Our customers have experienced numerous lightning induced transient hits. To date, we have no documented equipment failures downstream of our units after taking a lightning strike. A Surge Suppression Incorporated® device has the uncanny ability to sacrifice itself, if necessary, but it still protects the equipment downstream. And, the end-user receives a new unit, free of charge, under the “no hassles” warranty.

Product Line Breadth and Product Philosophy

There are over 80,000 Surge Suppression Incorporated® TVSS products currently available. Our product line encompasses a variety of unique designs tailored to specific applications and the unique needs of the user. We are in business to solve customer transient problems. We are not driven by what we know how to make, what we want to make, or what we want to market. Surge Suppression Incorporated® products provide transient let-through voltages that are among the lowest in the industry. This translates into superior transient protection for our end-users. This superior performance is directly related to our many years of TVSS design experience, our proven designs, our design testing and field testing programs, our quality assurance programs, our ISO 9001 manufacturing, and our utilization of the best materials and components available.

Typical End-User Benefits

It has been found that our equipment, by mitigating internal and external transient activity, provides:

- Reduction in downtime and increased equipment life
- Reduction of operational and overhead costs increasing the bottom line
- Reduced maintenance costs and intervals

The Surge Suppression Incorporated® products have been shown to significantly extend the life of electrical and electronic equipment including, computerized systems, communication systems, defense electronic systems, light bulbs, ballasts, motors and variable frequency drives. This is the most cost-effective “transient insurance” available.

The Surge Suppression Incorporated® Twenty-Five Year Warranty

Our professional grade units have a twenty-five year warranty. Surge Suppression Incorporated® warrants all these units for a period of twenty-five years from the date of installation. And, if a unit should fail for any reason, it will be replaced with a completely new unit free of charge for twenty-five years. Our warranty gives the term "cost effective surge protection" an entirely new meaning. Compare our initial cost and warranted lifecycle cost over a twenty-five year period with any other manufacturer in the industry. Surge Suppression Incorporated® products typically provide very competitive initial acquisition costs and the lowest lifecycle cost in the industry.