Ohmite Products for the Military / Aerospace Industry

When it’s mission critical, you can’t have a supplier flying blind. That’s why our 90 years of expertise in aerospace, avionics, and defense is indispensable. Ohmite-patented technologies and engineered excellence deliver superior electromechanical systems. We develop custom solutions and key resistive and voltage control products for the widest range of customers, including all major aircraft OEMs and foreign and U.S. government agencies. Our integrated supply chain and global footprint can optimize any order.

The Military and Aerospace industries have requirements for superior reliability due to harsh environments and long service life. With a wide array of components for Motion Control, Circuit Conditioning and a complete line of Circuit Protection products, Ohmite can provide a high-reliability solution ranging from COTS (Commercial Off The Shelf) to fully-custom products.

Ohmite’s product offerings are used in many different industries, ranging from industrial, medical, and transportation to military and aerospace. While every industry has its own unique challenges and nuances in optimizing product performance and cost, often the best solution comes from the ability to draw from experiences from other industries as well. This “out-of-the-box” thinking explains why Ohmite is so successful in enhancing product performance and making companies more competitive, regardless of sector.

We combine our component-specific expertise and manufacturing know-how with your industry-specific understanding to develop the unique solution to meet the challenges of the Military and Aerospace industries. Ohmite continues to expand product offerings through research and development and acquisitions to meet industry-specific needs.
270/280 Series
The 280 Type fixed resistors are manufactured with corrugated resistive wire. To accelerate cooling, the wire is securely fused to the ceramic core by the protective vitreous enamel coating to improve durability. These large, heavy-duty resistors are designed to withstand the frequent start-stop cycles characteristic of motor starting, dynamic braking, and other similar applications. Ohmite 270 Type fixed resistors are available for applications requiring wattage ratings from 12 to 1000 watts. Both rugged resistor series are equipped with lug terminals suitable for soldering or sturdy bolt connection. 270 and 280 Type resistors feature all-welded construction and durable lead-free vitreous enamel coating.

TAP600/800 Series
Ohmite's TAP600/800 Series of planar thick-film resistors dissipates up to 800 watts of power when used with a liquid or air-cooled heat-sink system. The TAP600/800 resistors are typically used in applications that include variable speed drives, power supplies, robotics, motor control, control devices, and other power designs. The resistive element is specially designed for low inductance and capacitance, and provides stable performance in addition to high wattage and pulse loading capability. The high alumina content ceramic metallized base plate is ideal for heat transfer and optimum discharge into a heatsink.

OX/OY Resistors
The OX/OY Series of fixed ceramic resistors are ideal for circuitry associated with surges, high peak power, or high energy. They offer enhanced performance in high voltage power supplies, R-C snubber circuits, and inrush limiters. The OX/OY resistors can often replace carbon-composition resistors which can be difficult to source. The OX/OY series is available in 1-watt and 2-watt sizes. Single impulse values of 50 and 80 joules respectively make these small axial resistors key in space-restricted applications.

HS Series
The Ohmite ARCOL brand HS Series is a high-performance molded-construction metal-housed resistor. They are available in higher power ratings than standard axial resistors and are better suited to withstanding vibration, shock, and harsh environmental conditions. The HS series resistors are aluminum housed to maintain high stability during operation and to permit secure mounting to chassis surfaces. The metal housing also provides heat-sinking capabilities, extending the series wattage up to 300 watts.

HPW Series
Ohmite’s HPW Series of high-precision wirewound resistors offer excellent stability. TCR values can be specified down to 1ppm and tolerances down to 0.005%. The HPW Series uses all-welded construction for reliability, and both the bobbin and encapsulation are of the same molded thermoplastic material. This produces a part with great connection that is unaffected by violent temperature cycling.