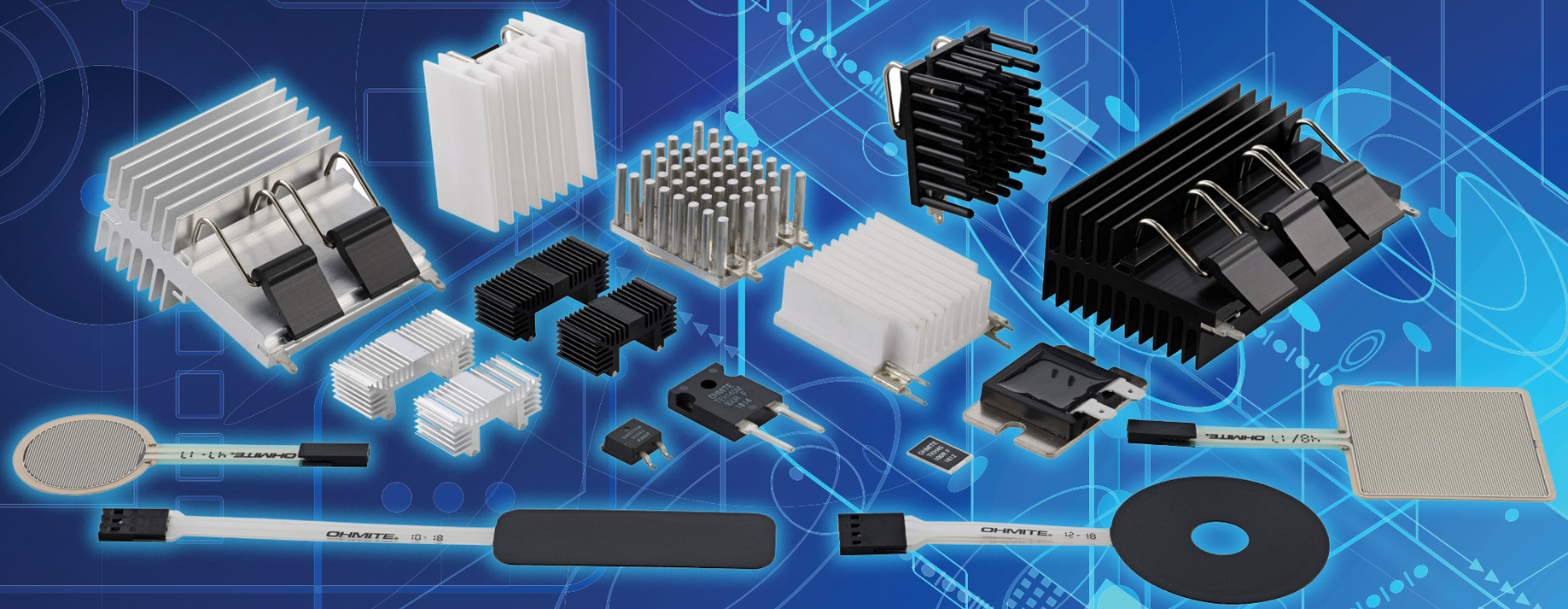
Newest Products From Ohmite

Resistors, Heatsinks and Sensors



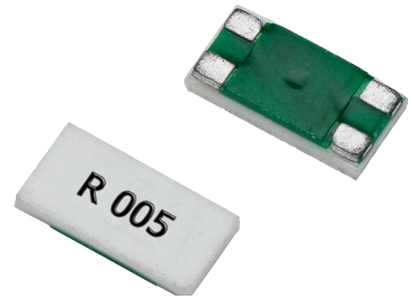
OHMITE®

LVT Series Resistor

Using a metal alloy strip as the resistive medium, the TCRs are kept at low levels. TCRs range from 150ppm to 50ppm depending on the value and size chosen. All popular sizes and values are covered with this Series. These sizes are available from 2 milli-ohms up to 20 milli-ohms producing a nice range for current sense applications that need to minimize power consumption. The Ohmite LVT Series is constructed in a Flip Chip style providing an economical current sense chip and a great extension to this ever-expanding offering from Ohmite.

- Flip Chip design produces an economical option
- Metal strip resistive element
- Values down to 2 milli-ohms and 1% tolerance
- Great stability with TCR down to 50ppm
- Industry standard sizes include:

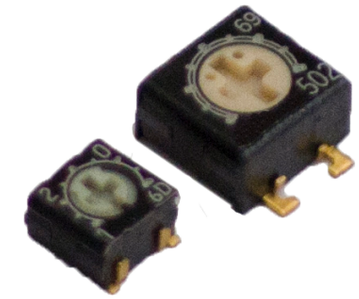
  0402
  0603
  1206
  2512



FC4T Series Resistor

The FC4T Series from Ohmite provides a great TCR rating and low values. The four-terminal construction is suited for current sense applications and helps deliver an accurate reading to the sensing circuit. The FC4T Series is produced in a Flip Chip design providing outstanding specifications at a lower cost. The FC4T Series carries a range of resistance from 0.005 to 0.100 ohms and a TCR down to 50ppm. Another great specification is the 0.5% tolerance in all values. Combining tolerance, values, and stability in a cost-conscious package draws attention from a multitude of engineers.

- Flip Chip design provides economical option
- Four-terminal Kelvin connection
- Values down to 5 milli-ohms and 0.5% tolerance
- Great stability with 50ppm TCR
- Industry standard size of 1206
- Compares to Ohmite LVK12 Series



SMU Series Potentiometers

The SMU Series offers a maximum power dissipation of 1/4 watt. The SMU is designed to keep the lowest profile. This is done by having the adjustment location on the top of the potentiometer. The adjustment of the full range of resistance can be accomplished with a single turn, providing the user with a quick adjustment. The adjustment can also be completed with either a flat head or Phillips screw driver, adding another layer of ease for the user. The SMU Series is constructed with an outer casing that meets UL 94V-0 requirements.

- Available in two sizes (0.125 and 0.25 watts)
- Single turn for quick adjustments
- Values from 500 ohms to 2 meg ohms
- Temperature coefficient down to 100ppm/C°
- Adjustment dial accepts “+” and “-“ drivers
- Sealed case meets UL94V-0 requirements
- Crosses to popular Bourns and Vishay trimmers

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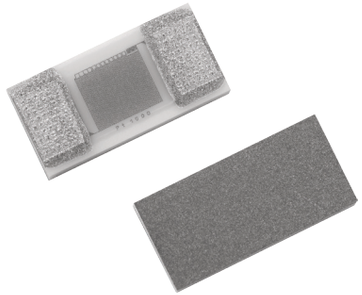
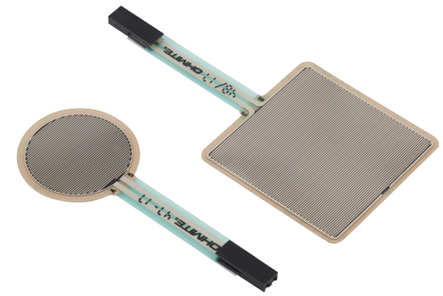


FST Series RTD Sensor

The FST Series Resistance Temperature Detector (RTD) from Ohmite provides predictable resistance change based on temperature. The SMD chip-based design is offered in the popular 0805 size. The FST Series is manufactured using a thin-film process and contains palladium (Pd) in the terminations. The Pd is known for its stability and allows a clean connection, helping to eliminate any thermal drift at the connection points. The FST Series is produced to the DIN 60751 standard and is available in both the B and 2B tolerances classes.

- Flip Chip design provides economical option
- Two tolerance classes available, B and 2B per DIN EN 60751.
- Multiple values available for high resolution (100, 500, and 1000 ohms)
- Standard TCR of 3850ppm for known value of change.
- Industry standard size 0805 chip



FSR Series Force Sensor

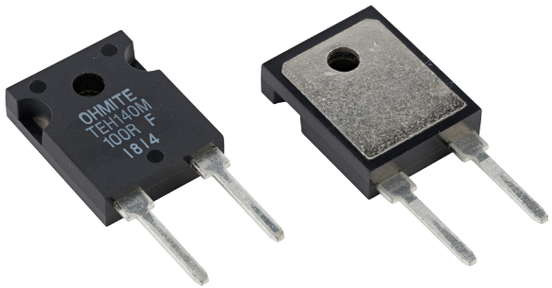
The Ohmite FSR Series (Force-Sensing Resistors) exhibit the unique characteristic of dynamic resistance related to the amount of applied force. In general applications, the more force applied to the surface of the sensor, the lower the resistance. The resistance change is inversely proportional to the applied force. Force Sensing Resistors offer many benefits for HMI (Human Machine Interface) sensing in a wide range of markets and applications versus mechanical switching or capacitive sensing.

- Three individual designs (square, circle, and strip)
- Terminal options (bare, solder tab, and connector)
- Connector equivalent to Nicomatic 14106-12
- Each sensor can operate up to 5 KG of force

FSP Series Position/Force Sensor

Ohmite's FSP Series (Force Sensing Potentiometers) are high-feature-set, cost-effective touch sensors enabling intuitive control and navigation. FSPs are "single touch" devices that simultaneously report both touch position and variable force. They offer easy integration, high resolution, low power, and are ideal for a wide range of HMI/MMI applications. Interfacing is simple via a host processor without the need for a dedicated MCU. The FSP Series is dynamically reconfigurable in firmware enabling multiple functions from a single sensor.

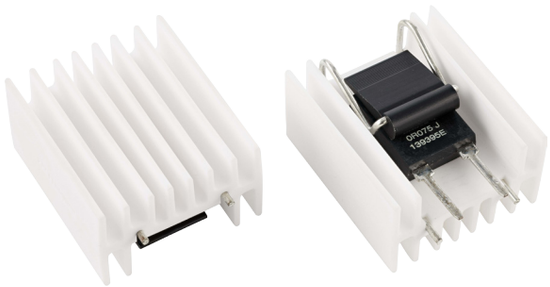
- "Single touch" devices that simultaneously report both touch position and variable force
- Cost-effective touch sensors enabling intuitive control and navigation
- Dynamically reconfigurable in firmware enabling multiple functions from a single sensor
- For use in advanced HMI and MMI applications
- Through-mode sensor construction



TEH140 Series

The Ohmite TEH140 series is a high-wattage multiple construction TO-247 resistor. The TEH140 Series is available in Thick Film and Thin Film construction creating lower-value options. The TEH140 Series performs well in high-frequency applications with an inductance of 12.25 nH at a 10mm terminal length. Thermal stability is also a strong point with TCR values down to 50 ppm and a tolerance of 1% available.

- 140 W high-power resistor in TO-247 molded package
- Only 0.9° C / W heat resistance between resistor and flange for excellent cooling
- Wide 10 mΩ to 510 kΩ resistance range, non-inductive design fit for high-frequency circuit and wide band amplifiers
- Applications include power electronics / inverter of automotive, rail traction, wind turbine, PV, UPS and industrial motor control as harmonic filter, dumping, snubber, gate control, bleeder resistor and rush current protection



WC Series Heatsink

The WC Series is produced using high purity ceramic. The WC is non-conductive, producing electrical isolation for high-voltage devices. Aluminum heatsinks require isolating materials to achieve the same result as the WC Series. The WC Series ceramic heatsink is ideal for applications using high voltage TO packaged devices.

- Ceramic construction offers good thermal efficiencies
- Vertical mounting using solderable pins
- Cam-style mounting clip requires no tools and securely holds device to heatsink
- Thermal resistance down to 12° C / W
- Designed for Standard TO-220, TO-247 and TO-264 devices
- Ceramic body carries great dielectric properties, up to 4 KV from clip to heatsink body

CR Series Heatsink

Ohmite introduces the CR Series heatsink with cam clip (patent pending). The CR Series offers flexibility, high performance, and is comparable to popular Aavid MAX-clip heatsinks. The cam clip system for TO-247 and TO-264 devices is proprietary and provides tool or fixture-free assembly. The CR Series is available in multiple extrusion lengths to support up to three devices and is available in black anodized or degreased finishes.

- Three extrusion styles in four lengths
- No tools required to secure device with Cam Clip System
- Dual Mount design allows up to six devices mounted to one heatsink
- Ability to accommodate multiple devices
- Vertical mounting using solderable pins
- Thermal resistance down to 4° C / W
- Compares to Popular Aavid part series 78015, 78010, 78220 and 78070

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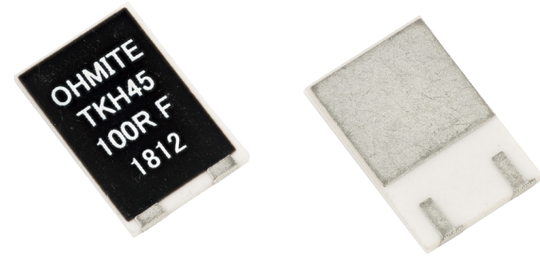
PA/PV Series Heatsink

The new P Series heatsink uses Forged Pin technology. The forged pins increase the surface area for greater free air convection. Forced air convection applications will benefit from the ability to force air in multiple directions through the pins. This creates versatility as the designer is no longer stuck forcing air in a single direction. Designed for TO-126, TO-220, TO-247 and TO-264 devices, each heatsink utilizes a patented clipping system. This system requires no tools and can lock in the device with one finger. The cam-locking system engages the device securely for a proper thermal connection. The P Series is the ideal type of heatsink for high-power density and small-size (1U or 2U) electronic packaging with forced convection cooling.

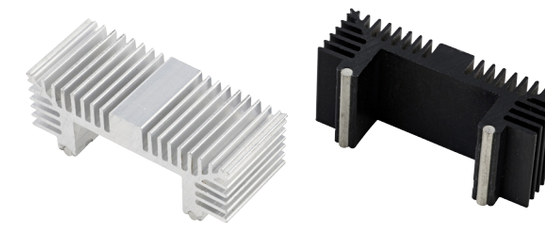
- Thermally efficient Pin Fin design
- Thermal resistance down to 7.46° C / W
- Pins utilized to create more surface area
- Air flow advantages created with pins; airflow can enter from any direction
- Patented Cam Clip attachment for easy assembly with no tools required
- Compatible with common industry package sizes: TO-220, TO-247, and TO-264
- Available in anodized and degreased versions



TKH45 Series Resistor

Designed to replace any TO-252 package. The TKH45 is rated at 45 watts with a thermal resistance of 3.0° C / W in a surfacemount design capable of high-wattage dissipation with the proper heatsink and thermal considerations. The Ohmite D Series heatsinks with the TKH45 present a complete solution for your surface-mount wattage requirements. The thick film construction enables non-inductive performance and is suited for pre-charge and snubber applications.

- SMD shares same land pattern as TO-252 with a low profile
- Up to 45 watts of power dissipation
- Larger resistance area promoting higher energy and greater thermal performance
- Elimination of wire bonds for greater reliability
- Use Ohmite D Series heatsinks for maximum performance



D Series Heatsink

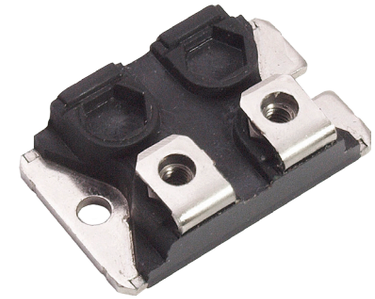
These surface-mount heatsinks are extruded, not stamped. These extruded designs are far more efficient than any stamped competitor. With other products it is difficult to transfer heat from the board level into the heatsink. The D Series extrusion design allows for large pads and a direct thermal path from the board and into the heatsink. The ability to get the heat off the board coupled with its large surface area yields a surface-mount heatsink unmatched in the market.

- Newest designs yield the most surface area in the market
- Designed to accommodate TO-252, TO-263 and TO-263 packages
- Design features include flat area for easy Pick-and-Place assembly operation
- Four different extrusion designs to accommodate multiple applications

TGHM Series Resistor-

The Ohmite TGHM Series removes the bulk of the standard SOT-227 package, creating an alternative for customers looking for connection options. The Ohmite TGHM relocates the terminations to the side, creating a lower-profile part. The side terminations use quick-connect terminals for an easy connection. These terminals eliminate the hardware and extra assembly time normally associated with the standard SOT-227 package. The new TGHM from Ohmite is also thermally efficient, providing up to 300 watts of power dissipation when properly heatsinked.

- Low profile compared to standard SOT-227
- Quick Connect terminations for wired connections
- Reduced assembly time with no hardware required for wired connections
- 300 watts of power dissipation with proper heatsink
- Reduced weight due to simplified design



TGH600 Series Resistor-

The Ohmite TGH600 Series uses new materials and technology to achieve high levels of wattage in a small SOT-227 package. Changes in the thick-film process allow new materials to be used to create an extremely efficient product. Proper liquid cooling is required to obtain the full wattage rating of this great resistor series. The TGH600 is sure to find its way in many applications with its high-wattage capability and industry-standard SOT-227 package size.

- Up to 600 watts of power dissipation when proper heatsinking is applied
- Non-inductive design ideally suited for high-frequency and pulse-load applications
- Internal construction includes the use of AlN for maximum thermal efficiencies
- Resistor is electrically insulated with a Dielectric rating up to 4 Kv

TAP650 Series Resistor

Ohmite's TAP650 delivers 650 watts of reliable power to a variety of power conditioning, power transmission, and power control applications. These resistors can be designed for liquid or air-cooled heatsink systems. Applications include variable speed drives, power supplies, robotics, motor control, and other control devices. The resistive element of the TAP650 is specially designed for low inductance and capacitance, providing stable performance in addition to high wattage and pulse-loading capability. The design of the TAP650 is especially suited to applications that require low-profile mounting, such as variable speed drives, power supplies, robotics, motor control, control devices, and other power designs.

- 650 watts of power dissipation with proper heatsinking
- Leaded design for low profile and custom terminations
- Standard lead length of 250mm
- Wide resistance range values from 0.25 ohms to 1 meg
- 5% tolerance standard beats industry norms of 10%
- Ideal for variable speed drives, power supplies, and other power and control designs

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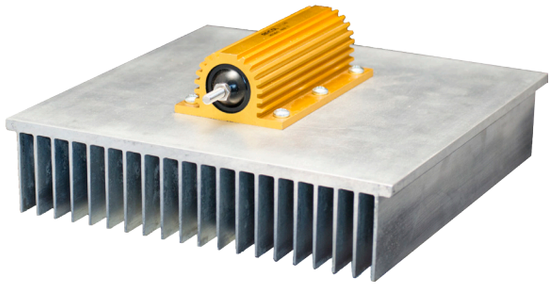


HS Series Heatsink

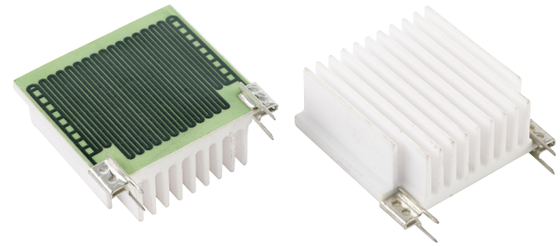
If you are using popular aluminum-housed resistors, look no further than the HS Series extruded heatsinks to complete your design. Each heatsink is drilled and tapped to the standard pattern for these popular resistor types. Each HS Series heatsink is specifically characterized for each resistor size, so no guesswork is required.

- Three extrusion styles in four lengths
- Pre-drilled hole patterns accommodate HS Series chassis mount resistors
- Each heatsink is designed for a specified HS Series resistor wattage
- Thermal resistance down to 0.34° C / W
- Full customizations available, including multiple finishes, bolt patterns, and extrusions

ARF Series Resistor

ARF Low Profile Wirewound Metal Clad Resistors offer a flexible design with high pulse capability. They are ideally suited to braking and inverter / converter applications. Enhanced power levels can be achieved when mounted to a heatsink.

- Six wattages / sizes: heatsinkable up to 600 watts
- Easy mounting with pre-drilled holes
- Durable wirewound construction with ohm values up to 1100 ohms
- Flying leads for easy connection and the possibility of custom connectors
- Insulation voltage exceeds 4000 volts



TRH Series Resistor

The Ohmite TRH combines two products in one. Ohmite uses advanced thick-film printing processes to place a resistor onto an ceramic heatsink. The TRH Series replaces common thick-film heatsinkable products and the heatsink and hardware associated with them. The resistor and heatsink are one unit and work together with great thermal efficiency.

- Power dissipation of 30 watts in free air
- Designed to be board mounted with wide terminals for stability
- Available three different application designs: Continuous Power, High Voltage and Surge
- Substrate material is 95% Alumina for thermal efficiencies
- Dielectric strength of 5 KvDC through substrate

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