

# HIGH

**TEMPERATURE SURGE  
PROTECTION FOR HIGH  
POWER APPLICATIONS**



## Highest Level of Safety and Reliability in Extremely Hot Environments

Developed by using a new silicone coating technology, the HMOV™ Varistor Series is the first varistor series designed to operate in ambient temperatures up to 125°C with 2500V isolation voltage. It also offers extended reliability confirmed by 1000-cycle thermal shock testing.

The HMOV™ Varistor Series offers high surge current handling capability up to 10kA (8/20µs pulse) for application voltages of 11VAC to 625VAC, and also meets UL 1449 and IEC 60950-1 international standards.

### Applications

- Industrial Automation Controls
- Solar Power Inverters
- Security Systems
- Fire Alarms and Smoke Detectors
- LED Lighting
- Base Transceiver Station (BTS) Power Supplies
- Harsh Environment/Outdoor Power Supplies

## Circuit protection solution for AC or DC applications with high surge energy absorption requirements and high operating temperatures



HMOV™ Varistor Series 20mm



HMOV™ Varistor Series 10mm

### Features

- High operating temperature of 125°C
- High isolation voltage of 2500V
- Thermal shock tested from -55°C to +125°C, 1000 cycles
- Meets UL 1449 and IEC 60950-1

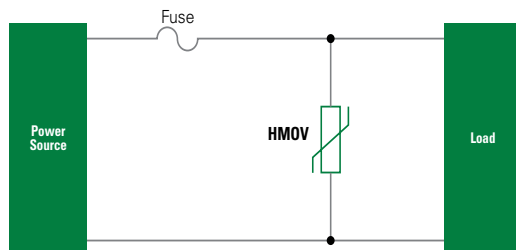
### Benefits

- Eliminates the need for an additional heat sink or potting process used to dissipate heat
- Ideally suited for use in higher ambient temperature applications
- Eliminates the need for the additional insulation material
- Minimize PCB size by reducing space required between the varistor and other components
- Offers enhanced reliability that can extend the lifetime of the end product
- Enables end product worldwide compliance



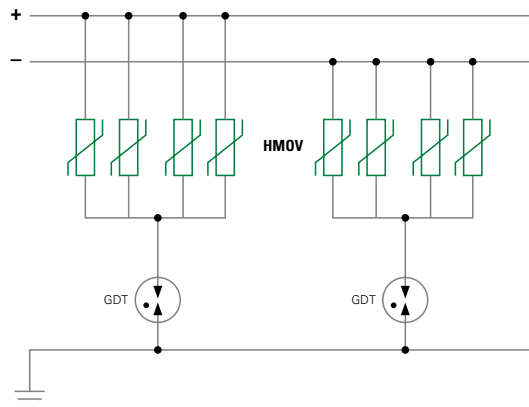
### HMOV Varistor Series—Enhanced Safety and Protection

The HMOV™ Varistor Series builds on the advantages offered by Littelfuse UltraMOV™ and LV UltraMOV™ varistors. By using a new silicone coating technology, the HMOV™ Varistor Series extends the operating temperature to 125°C and the isolation voltage to 2500V. The maximum peak surge current is rated up to 10kA (8/20µs pulse) to protect against indirect lightning strikes, switching surge transients, and abnormally fast transients. The HMOV™ Varistor Series has agency approvals from UL and IEC. It is suitable for high temperature applications, such as outdoor locations, industrial environments, and high power devices like LED lighting, power supply units, uninterruptible power supplies, inverters, motors, and many more.



### Telecom/SPD Application Using HMOV™ Varistor Series

Telecom Power Supply Units (PSUs) typically range from 36VDC to 72VDC in Base Transceiver Stations (BTS) in outdoor locations. Low Voltage Surge Protective Device (SPD) modules are used in industrial applications to provide module-based surge protection of complete systems.



### Applications and Markets for HMOV™ Varistor Series

	Markets		
	Industrial	Outdoor	High Power
Applications	Automation Controls	Solar Power Inverters	Base Transceiver Station Power Supplies
	Security Systems	LED Lighting	Uninterruptible Power Supplies
	Fire Alarms and Smoke Detectors	Smart Meters (Electricity, Natural Gas, Water)	Hazardous Locations Power Supplies