

# 25TPMOV<sup>®</sup> (Thermally Protected MOV)

Thermally Protected Metal Oxide Varistor

## SURGE PROTECTION

SELF-PROTECTED MOV UTILIZING THE FASTEST & SAFEST DISCONNECT SYSTEM AVAILABLE FOR DESIGNERS OF SPDs & ELECTRICAL EQUIPMENT



## 30% SMALLER FOOTPRINT - SAME RELIABLE TPMOV TECHNOLOGY

Mersen's TPMOV technology eliminates common failure modes that occur in the field with standard metal oxide varistors. Internally it is comprised of a voltage clamping device and a disconnecting apparatus that monitors the status of the metal oxide disk, making the TPMOV surge suppression component a fail-safe device. Upon failure, the TPMOV surge suppression component is also equipped with a visual pin indicator as well as a normally open micro-switch, providing remote indication if applicable. Mersen's 25TPMOV series surge suppression component is rated for 25kA - 8/20 $\mu$ s peak surge current and is available for maximum continuous operating voltages (MCOV) from 150V to 320VAC.

Technical Data Overview	
Volts [U <sub>n</sub> ]	150-320VAC
Nominal Discharge Current Rating [I <sub>n</sub> ]	10kA
Surge Capacity	25kA
Short-Circuit Current Rating [SCCR]	200kA
Response Time	Less than 1 nanosecond (one per phase)
Ambient Temperature Rating	-40°C to +85°C

## FEATURES/BENEFITS

- Industry leading TPMOV technology
- Now available in a standard 25mm MOV footprint
- Upstream overcurrent protection not required
- Optional built-in end-of-life indication
- Type 1 SPD allows for use in all types of SPD applications

## APPLICATIONS

- For OEM design and build

## APPROVALS/STANDARDS

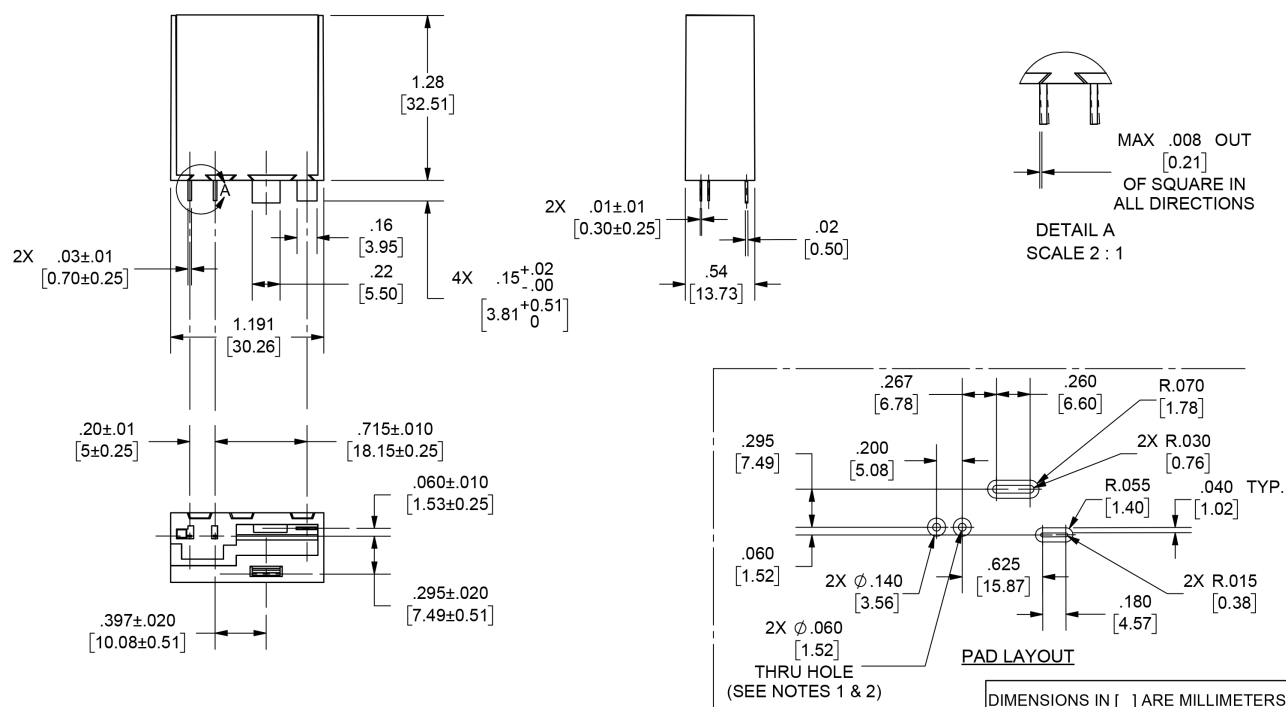
- ANSI/UL 1449 5th Edition, Type 1 CA SPD, File E210793
- RoHS Compliant



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General Product Specifications						
Mounting:				Short leads for PCB		
Single Impulse Surge Capacity:				25kA {8/20µs}		
Nominal Discharge Current Rating:				10kA		
Response Time:				≤25 ns		
Frequency:				50-60Hz		
Mechanical End-of-Life Indicator:				N/C Tact Switch {12VDC, 50mA}		
Operating & Storage Temperature:				−40°C to +85°C		
Enclosure:				Thermoplastic		
Flammability:				UL 94 V-0		
Catalog Number	ItemNumber	I <sub>n</sub>	Surge Capacity	SCCR	Maximum Continuous Operating Voltage (MCOV, U <sub>c</sub> )	Voltage Protection Rating (VPR) (UL 1449, 6kV, 3kA)
25TPMOVSL150	83050149	10kA	25kA	200kA	150VAC	600V
25TPMOVSL320	83050150	10kA	25kA	200kA	320VAC	1000V

Dimensional Drawing of TPMOV technology protected modules 



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