25TPMOV® (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 - 8/20µs peak surge current and is available for maximum continuous operating voltages (MCOV) from 150V to 320VAC.

Technical Data Overview	
Volts (U_n)	150-320VAC
Nominal Discharge Current Rating (I_n)	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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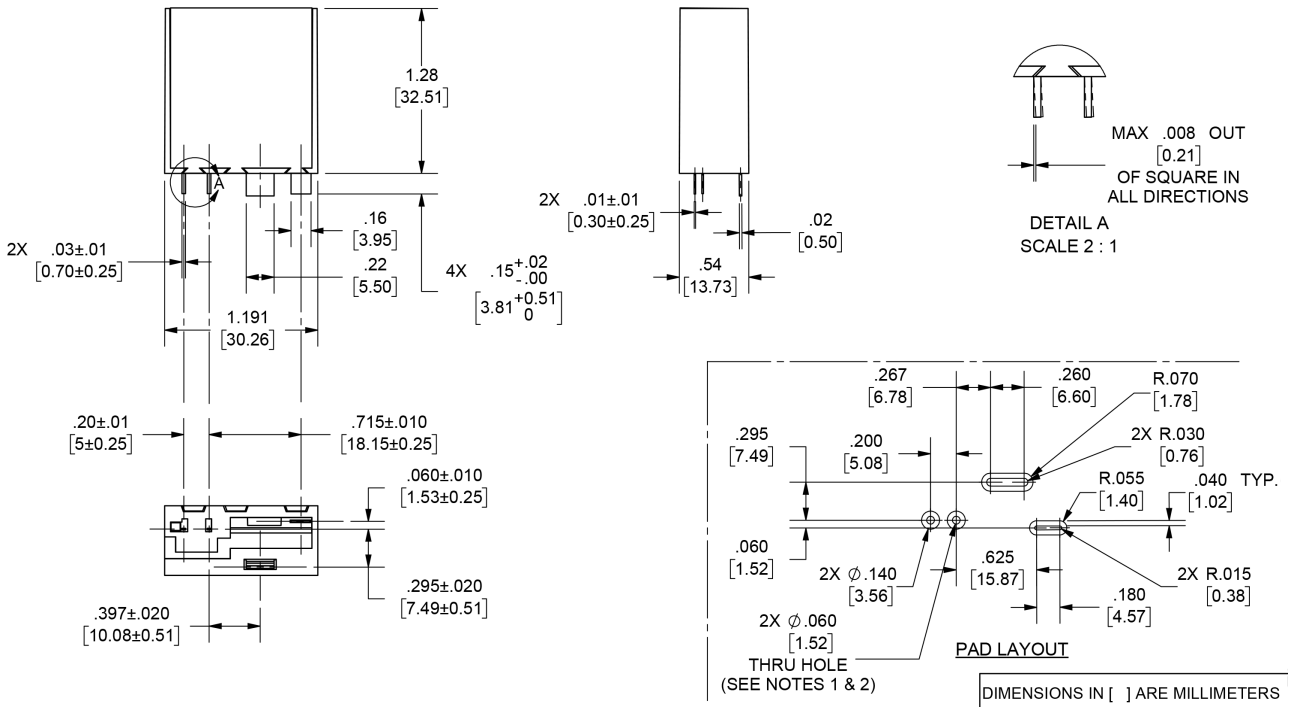
General Product Specifications	
Mounting:	Short leads for PCB
Single Impulse Surge Capacity:	25kA (8/20µs)
Nominal Discharge Current Rating:	10kA
Response Time:	≤25 ns
Frequency:	50-60Hz
Mechanical End-of-Life Indicator:	N/C Tact Switch (12VDC, 50mA)
Operating & Storage Temperature:	–40°C to +85°C
Enclosure:	Thermoplastic
Flammability:	UL 94 V-0

Catalog Number	ItemNnumber	I_n	Surge Capacity	SCCR	Maximum Continuous Operating Voltage (MCOV, Uc)	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 TPMOV TECHNOLOGY



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