

TPMOV

SURGE SUPPRESSION



THERMALLY PROTECTED MOV (TPMOV)

The Ferraz Shawmut Thermally Protected MOV has been developed to assist in eliminating the failure characteristics of Metal-Oxide-Varistors. The TPMOV is a fail-safe device. It is composed of a voltage clamping device and a disconnecting apparatus that monitors the status of the metal-oxide disk. In the event that the disk is approaching breakdown it is effectively disconnected from system power. The TPMOV is rated for 40ka of 8/20us surge current. The TPMOV ratings are available from 150V to 550V. The TPMOV has been designed with two built in isolated indicating features. The first is a visual indicator. When the unit has disconnected from system power, two isolated pins will be noticed atop the TPMOV enclosure. The second feature is a remote indicator composed of a N/O micro-switch. In the event that the TPMOV has disconnected system power the switch will change status. These features lower costly engineering time that would be required for traditional MOV products.

Ratings

- 150V to 550VAC/100KA I.R.
- 40ka 8/20 μ s Withstand

Approvals

- UL 1449 2nd Edition Recognized

Features/Benefits

- High Energy Capacity
- Consistent footprint with 25–40mm MOV's
- Built-In Visual/Remote Indication
- Fail-Safe Operation

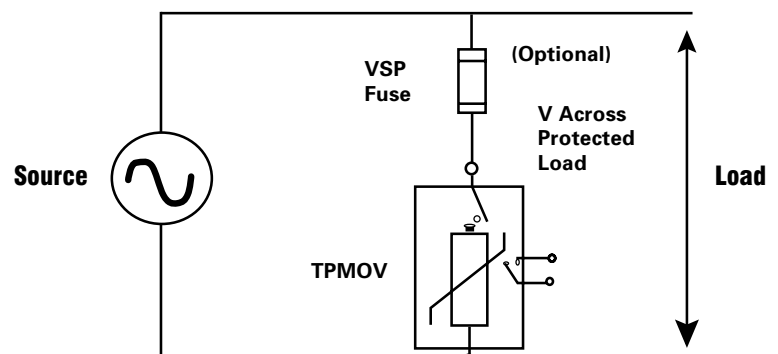
APPLICATION:

- Transient Voltage Surge Suppressors
- AC/DC Distribution Systems
- High Voltage Power Supplies
- Telecommunications Equipment
- Motor Control Systems
- Computer Related Products
- PLC Applications
- Power Transfer Switches

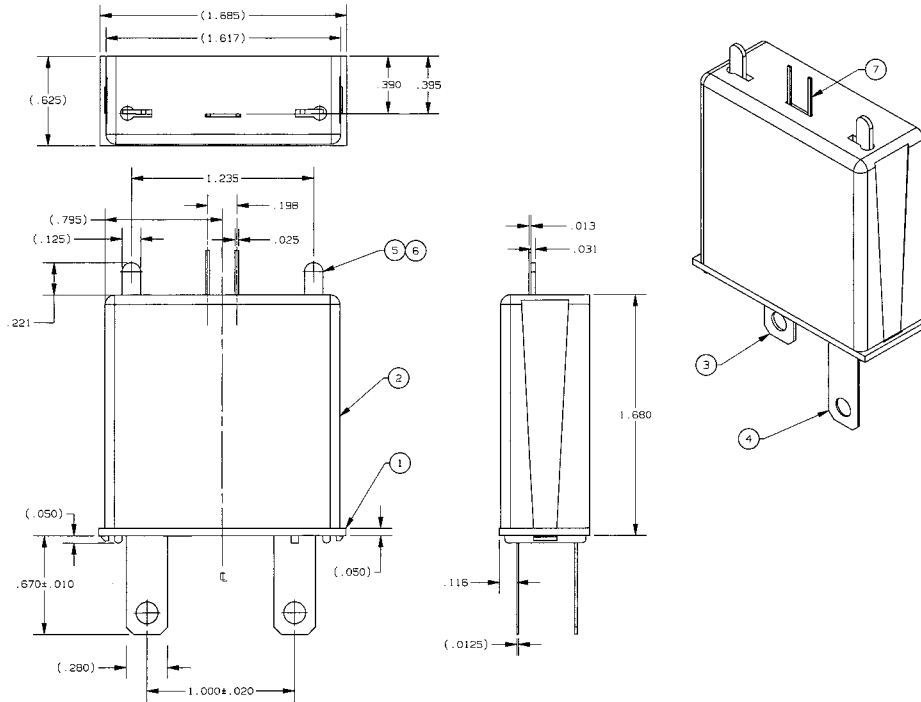
LAYOUT: The TPMOV footings are similar* to that of equivalent voltage ratings of traditional 25 to 40mm MOV's. The TPMOV can be utilized on existing systems that utilize traditional MOV's without costly board redesigns.

*refer to dimensional drawings on next page.

Typical Application



DIMENSIONAL DRAWING OF TPMOV



FERRAZ SHAWMUT PART NUMBER	SAFETY STANDARDS RECOGNITION	MAXIMUM RATING		PEAK CURRENT 1 PULSE 8/20us	TPMOV VOLTAGE @ 1mA	
		AC	DC		Vmin	Vmax
150TPMOV	UL1449	150V	200V	40,000A	212V	259V
250TPMOV	UL1449	250V	330V	40,000A	354V	432V
270TPMOV	UL1449	270V	360V	40,000A	382V	466V
320TPMOV	UL1449	320V	420V	40,000A	453V	553V
420TPMOV	UL1449	420V	550V	40,000A	594V	725V
510TPMOV	UL1449	510V	675V	40,000A	722V	881V
550TPMOV	UL1449	550V	700V	40,000A	778V	950V