

Description

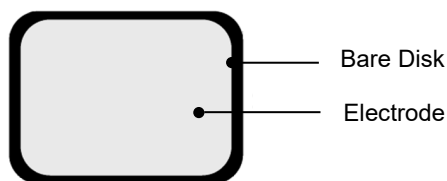
Metal Oxide Varistor (MOV) is a nonlinear resistance component with zinc oxide (ZnO) as its main constituent. The resistance of an MOV is sensitive to changes in the applied voltage. Below the threshold voltage, the MOV exhibits high resistance, allowing only a negligibly small leakage current to flow. Once the threshold voltage is exceeded, the resistance of the MOV drops sharply, enabling the conduction of a large current. This characteristic makes the MOV suitable for detecting and suppressing surge voltage and overvoltage, thereby protecting the circuit from damage caused by excessive voltage.

The Metal Oxide Varistor (MOV) finds wide application in various fields such as photovoltaics, communication, lightning protection, power supply, and power strips. It serves to suppress transient overvoltage and absorb surge energy within the circuit.

SETsafe | SETfuse offers Metal Oxide Varistors (MOV) with maximum peak current ratings ranging from 40 kA to 60 kA, and maximum continuous voltage ratings from 150VAC to 750 VAC. Safety certification includes UL, cUL, and complies with RoHS and REACH requirements.



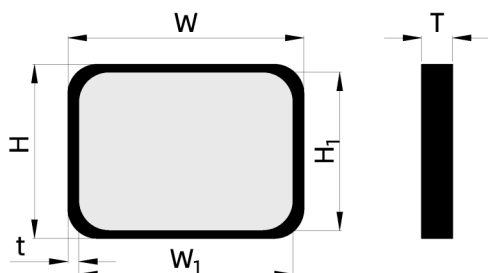
Product Structure



Agency Approvals

Agency	Standards	No.
	UL 1449 4 th Edition	On-going
	CSA C22.2 NO.269.5-17	On-going

Dimensions (mm)



W	W ₁	H	H ₁	t (min.)
38.0±0.8	35.4±0.5	28.0±0.8	25.5±0.5	0.8

*Various electrode shapes of uncoated MOV or coated MOV can be customized

Specification

Model	Surge Level	Max. Continuous Operating Voltage		Varistor Voltage @1 mA DC		Clamping Voltage (Max.)		Max. Discharge Current (8/20 μs)		Impulse Discharge Current (10/350 μs)	Max. Energy (10/1000 μs)	Typical Capacitance (Reference) @1 kHz
		VAC	VDC	Min.	Max.	V _C	I _P	I _n	I _{max}	I _{imp}	(J)	(pF)
		(V)	(V)	(V)	(V)	(V)	(A)	(kA)	(kA)	(kA)		
YMJ33R241K	T	150	200	216	264	395	200	20	40	7.0	480	5650
YMJ33R271K	T	175	225	243	297	455	200	20	40	7.0	540	5100
YMJ33R301K	T	190	250	270	330	500	200	20	40	7.0	600	4510
YMJ33R331K	T	210	275	297	363	550	200	20	40	7.0	656	4150
YMJ33R361K	T	230	300	324	396	595	200	20	40	7.0	745	3750
YMJ33R391K	T	250	320	351	429	650	200	20	40	7.0	830	3500
YMJ33R431K	T	275	350	387	473	710	200	20	40	7.0	920	2950
YMJ33R471K	T	300	385	423	517	775	200	20	40	7.0	1000	2880
YMJ33R511K	T	320	415	459	561	845	200	20	40	7.0	1060	2650
YMJ33R561K	T	350	460	504	616	925	200	20	40	6.5	1150	2450
YMJ33R621K	T	385	505	558	682	1025	200	20	40	6.5	1250	2200
YMJ33R681K	T	420	560	612	748	1120	200	20	40	6.5	1250	2000
YMJ33R711K	T	440	585	639	781	1170	200	20	40	6.5	1250	1900
YMJ33R751K	T	460	615	675	825	1240	200	20	40	6.0	1280	1820
YMJ33R821K	T	510	670	738	902	1355	200	20	40	5.0	1300	1800
YMJ33R911K	T	550	745	819	1001	1500	200	20	40	5.0	1475	1500
YMJ33R951K	T	575	760	855	1045	1565	200	20	40	4.0	1500	1400
YMJ33R102K	T	625	825	900	1100	1650	200	20	40	4.0	1550	1350
YMJ33R112K	T	680	895	990	1210	1815	200	20	40	4.0	1750	1230

★ The I_n/I_{max}/I_{imp} could be applied to the same varistor.

★ We have specified product for DC application, please make a note when purchasing.

MOV Disk-Lightning Protection Type For T1 Feature & Model List Overview

Nominal Operating Voltage U_n (V)		Model				Maximum Continuous Operating Voltage U_n (V)		Page	
		YMJ34S	YMJ33R	YMJ36R	YMJ40R	AC	DC	AC	DC
500V	480V	○	○	○	○	750	990	680	895
	415V	○	○	○	○	625	825	550	745
	380V	○	○	○	○	510	670	460	615
	100V	○	○	○	○	420	560	385	505
	240V	○	○	○	○	350	460	320	415
	100V	○	○	○	○	300	385	275	350
	220V	○	○	○	○	250	320	230	300
	100V	○	○	○	○	210	275	190	250
	250V	○	○	○	○	175	225	150	200
	120V	○	○	○	○	140	180	130	170
250V	125V	○	○	○	○	115	150	95	125
	100V	○	○	○	○	75	100	60	85
	48V	○	○	○	○	50	65	40	56
	24V	○	○	○	○	35	45	30	38
	12V	○	○	○	○	25	31	20	26
	12V	○	○	○	○	17	22	14	18
	12V	○	○	○	○	14	18		
	12V	○	○	○	○				
	12V	○	○	○	○				
	12V	○	○	○	○				