

Description

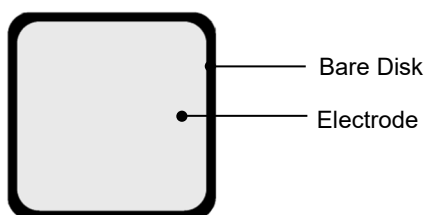


Metal Oxide Varistor (MOV) is a nonlinear resistance component with zinc oxide (ZnO) as its main constituent. The resistance of an MOV is sensitive to changes in the applied voltage. Below the threshold voltage, the MOV exhibits high resistance, allowing only a negligibly small leakage current to flow. 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 20 kA to 80 kA, and maximum continuous voltage ratings from 130VAC to 750 VAC. Safety certification includes UL, cUL, and complies with RoHS and REACH requirements.

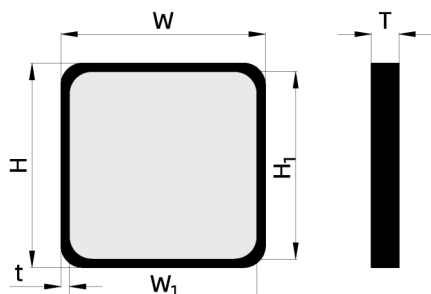
Product Structure



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.)
40.5±0.8	37.5±0.5	40.5±0.8	37.5±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)		Max. Energy (10/1000 μs)	Typical Capacitance (Reference) @1 kHz
		VAC	VDC	Min.	Max.	V _C	I _p	I _n	I _{max}	(J)	(pF)
		(V)	(V)	(V)	(V)	(V)	(A)	(kA)	(kA)		
YMJ40S241K	K	150	200	216	264	395	500	40	80	1200	13350
YMJ40S271K	K	175	225	243	297	455	500	40	80	1350	11500
YMJ40S301K	K	190	250	270	330	500	500	40	80	1500	10500
YMJ40S331K	K	210	275	297	363	550	500	40	80	1650	9000
YMJ40S361K	K	230	300	324	396	595	500	40	80	1800	9000
YMJ40S391K	K	250	320	351	429	650	500	40	80	1950	8000
YMJ40S431K	K	275	350	387	473	710	500	40	80	2150	7500
YMJ40S471K	K	300	385	423	517	775	500	40	80	2350	6700
YMJ40S511K	K	320	415	459	561	845	500	40	80	2550	6200
YMJ40S561K	K	350	460	504	616	925	500	40	80	2800	5700
YMJ40S621K	K	385	505	558	682	1025	500	40	80	3100	5200
YMJ40S681K	K	420	560	612	748	1120	500	40	80	3400	4700
YMJ40S711K	K	440	585	639	781	1170	500	40	80	3500	4500
YMJ40S751K	K	460	615	675	825	1240	500	40	80	3600	4200
YMJ40S821K	K	510	670	738	902	1355	500	40	80	3900	3900
YMJ40S911K	K	550	745	819	1001	1500	500	40	80	4100	3500
YMJ40S951K	K	575	760	855	1045	1565	500	40	80	4300	3350
YMJ40S102K	K	625	825	900	1100	1650	500	40	80	4500	3200
YMJ40S112K	K	680	895	990	1210	1815	500	40	80	5000	2900
YMJ40S122K	K	750	990	1080	1320	1980	500	40	80	5500	2700

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

MOV Disk-Lightning Protection Type For T2 Feature & Model List Overview

Nominal Operating Voltage U_n (V)		Model				Maximum Continuous Operating Voltage U_n (V)		Page	
		YMJ25D	YMJ37S	YMJ53D	YMJ40S	AC	DC		
500V	480V	YMJ25D122K	YMJ37S122K	YMJ53D122K	YMJ40S122K	750	990		
	415V	YMJ25D112K	YMJ37S112K	YMJ53D112K	YMJ40S112K	680	895		
		YMJ25D102K	YMJ37S102K	YMJ53D102K	YMJ40S102K	625	825		
	380V	YMJ25D911K	YMJ37S911K	YMJ53D911K	YMJ40S911K	550	745		
		YMJ25D821K	YMJ37S821K	YMJ53D821K	YMJ40S821K	510	670		
	100V	YMJ25D751K	YMJ37S751K	YMJ53D751K	YMJ40S751K	460	615		
		YMJ25D681K	YMJ37S681K	YMJ53D681K	YMJ40S681K	420	560		
	240V	YMJ25D621K	YMJ37S621K	YMJ53D621K	YMJ40S621K	385	505		
		YMJ25D561K	YMJ37S561K	YMJ53D561K	YMJ40S561K	350	460		
	100V	YMJ25D511K	YMJ37S511K	YMJ53D511K	YMJ40S511K	320	415		
220V		YMJ25D471K	YMJ37S471K	YMJ53D471K	YMJ40S471K	300	385		
250V	100V	YMJ25D431K	YMJ37S431K	YMJ53D431K	YMJ40S431K	275	350		
		YMJ25D391K	YMJ37S391K	YMJ53D391K	YMJ40S391K	250	320		
	120V	YMJ25D361K	YMJ37S361K	YMJ53D361K	YMJ40S361K	230	300		
		YMJ25D331K	YMJ37S331K	YMJ53D331K	YMJ40S331K	210	275		
	100V	YMJ25D301K	YMJ37S301K	YMJ53D301K	YMJ40S301K	190	250		
		YMJ25D271K	YMJ37S271K	YMJ53D271K	YMJ40S271K	175	225		
	125V	YMJ25D241K	YMJ37S241K	YMJ53D241K	YMJ40S241K	150	200		
		YMJ25D221K	○	○	○	140	180		
	48V	YMJ25D201K	○	○	○	130	170		
		○	○	○	○	115	150		
○		○	○	○	95	125			
○		○	○	○	75	100			
24V		○	○	○	○	60	85		
		○	○	○	○	50	65		
12V		○	○	○	○	40	56		
		○	○	○	○	35	45		
AC		DC	○	○	○	○	30	38	
			○	○	○	○	25	31	
AC	DC	○	○	○	○	20	26		
		○	○	○	○	17	22		
AC	DC	○	○	○	○	14	18		
		○	○	○	○				