

Description

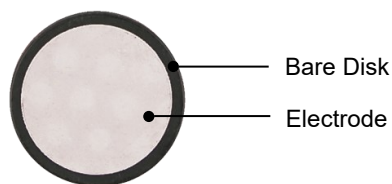
Metal Oxide Varistor (MOV) is a nonlinear resistance component with zinc oxide (ZnO) as its main constituent. The resistance of an MOV is sensitive to changes in the applied voltage. Below the threshold voltage, the MOV exhibits high resistance, allowing only a negligibly small leakage current to flow. 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 comply with RoHS and REACH requirements.



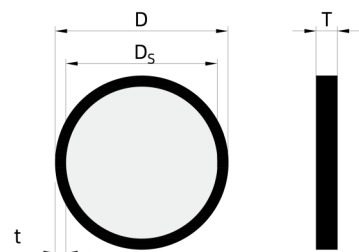
Product Structure



Agency Approvals

Agency	Standards	No.
	UL 1449 4 th Edition	E322662
	CSA C22.2 NO.269.5-17	E322662



Dimensions (mm)



D	D _s	t (min.)
24.5±0.8	20.6±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 (For reference only) @1 kHz	Agency Information	
		VAC	VDC	Min.	Max.	V _C	I _p	I _n	I _{max}	(J)	(pF)		
		(V)	(V)	(V)	(V)	(V)	(A)	(kA)	(kA)			UL	cUL
YMJ25D201K	K	130	170	180	220	340	150	10	20	190	3200	●	●
YMJ25D221K	K	140	180	198	242	360	150	10	20	200	2900	●	●
YMJ25D241K	K	150	200	216	264	395	150	10	20	220	2650	●	●
YMJ25D271K	K	175	225	243	297	455	150	10	20	255	2400	●	●
YMJ25D301K	K	190	250	270	330	500	150	10	20	275	2100	●	●
YMJ25D331K	K	210	275	297	363	550	150	10	20	300	1900	●	●
YMJ25D361K	K	230	300	324	396	595	150	10	20	330	1750	●	●
YMJ25D391K	K	250	320	351	429	650	150	10	20	360	1600	●	●
YMJ25D431K	K	275	350	387	473	710	150	10	20	380	1500	●	●
YMJ25D471K	K	300	385	423	517	775	150	10	20	400	1400	●	●
YMJ25D511K	K	320	415	459	561	845	150	10	20	420	1250	●	●
YMJ25D561K	K	350	460	504	616	925	150	10	20	440	1150	●	●
YMJ25D621K	K	385	505	558	682	1025	150	10	20	450	1050	●	●
YMJ25D681K	K	420	560	612	748	1120	150	10	20	460	950	●	●
YMJ25D751K	K	460	615	675	825	1240	150	10	20	510	850	●	●
YMJ25D821K	K	510	670	738	902	1355	150	10	20	520	830	●	●
YMJ25D911K	K	550	745	819	1001	1500	150	10	20	620	730	●	●
YMJ25D102K	K	625	825	900	1100	1650	150	10	20	690	660	●	●
YMJ25D112K	K	680	895	990	1210	1815	150	10	20	760	600	●	●
YMJ25D122K	K	750	990	1080	1320	1980	150	10	20	820	530	●	●

● : Approved ○ : Unauthorized ● : RoHS & REACH Compliant

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	750	990	
500V	480V	YMJ25D122K	YMJ37S122K	YMJ53D122K	YMJ40S122K	750	990	
		YMJ25D112K	YMJ37S112K	YMJ53D112K	YMJ40S112K	680	895	
	415V	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	
	240V	YMJ25D681K	YMJ37S681K	YMJ53D681K	YMJ40S681K	420	560	
		YMJ25D621K	YMJ37S621K	YMJ53D621K	YMJ40S621K	385	505	
	100V	YMJ25D561K	YMJ37S561K	YMJ53D561K	YMJ40S561K	350	460	
	220V	YMJ25D511K	YMJ37S511K	YMJ53D511K	YMJ40S511K	320	415	
250V	100V	YMJ25D471K	YMJ37S471K	YMJ53D471K	YMJ40S471K	300	385	
		YMJ25D431K	YMJ37S431K	YMJ53D431K	YMJ40S431K	275	350	
	100V	YMJ25D391K	YMJ37S391K	YMJ53D391K	YMJ40S391K	250	320	
		YMJ25D361K	YMJ37S361K	YMJ53D361K	YMJ40S361K	230	300	
	120V	YMJ25D331K	YMJ37S331K	YMJ53D331K	YMJ40S331K	210	275	
		YMJ25D301K	YMJ37S301K	YMJ53D301K	YMJ40S301K	190	250	
		YMJ25D271K	YMJ37S271K	YMJ53D271K	YMJ40S271K	175	225	
		YMJ25D241K	YMJ37S241K	YMJ53D241K	YMJ40S241K	150	200	
		YMJ25D221K	○	○	○	140	180	
		YMJ25D201K	○	○	○	130	170	
125V		○	○	○	○	115	150	
		○	○	○	○	95	125	
	48V	○	○	○	○	75	100	
		○	○	○	○	60	85	
	24V	○	○	○	○	50	65	
		○	○	○	○	40	56	
		○	○	○	○	35	45	
		○	○	○	○	30	38	
	12V	○	○	○	○	25	31	
		○	○	○	○	20	26	
	○	○	○	○	17	22		
	○	○	○	○	14	18		
AC	DC	20	60	70	80	AC	DC	

Maximum Peak Current (8/20 μ s) (kA)