

Description

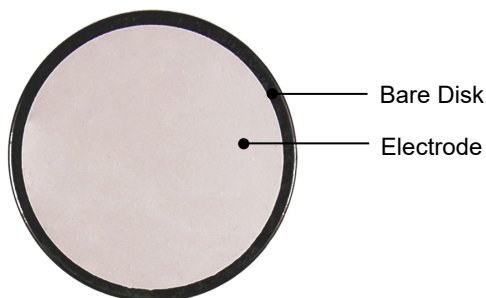


Metal Oxide Varistor (MOV) is a nonlinear resistance component with zinc oxide (ZnO) as its main constituent. The resistance of an MOV is sensitive to changes in the applied voltage. Below the threshold voltage, the MOV exhibits high resistance, allowing only a negligibly small leakage current to flow.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

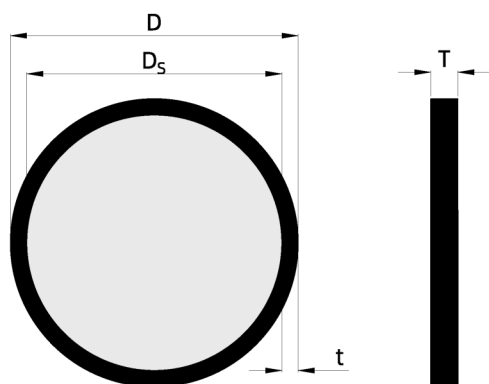
Product Structure



Agency Approvals

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

Dimensions (mm)



D	D _s	t (min.)
52.0±0.8	47.0±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)	UL	cUL
		(V)	(V)	(V)	(V)	(V)	(A)	(kA)	(kA)			UL	cUL
YMJ53D241K	K	150	200	216	264	395	500	35	70	650	12500	●	●
YMJ53D271K	K	175	225	243	297	455	500	35	70	700	11000	●	●
YMJ53D301K	K	190	250	270	330	500	500	35	70	765	10000	●	●
YMJ53D331K	K	210	275	297	363	550	500	35	70	825	9000	●	●
YMJ53D361K	K	230	300	324	396	595	500	35	70	850	8500	●	●
YMJ53D391K	K	250	320	351	429	650	500	35	70	885	7500	●	●
YMJ53D431K	K	275	350	387	473	710	500	35	70	990	7000	●	●
YMJ53D471K	K	300	385	423	517	775	500	35	70	1080	6500	●	●
YMJ53D511K	K	320	415	459	561	845	500	35	70	1150	6000	●	●
YMJ53D561K	K	350	460	504	616	925	500	35	70	1200	5500	●	●
YMJ53D621K	K	385	505	558	682	1025	500	35	70	1300	5000	●	●
YMJ53D681K	K	420	560	612	748	1120	500	35	70	1350	4500	●	●
YMJ53D711K	K	440	585	639	781	1170	500	35	70	1350	4500	●	●
YMJ53D751K	K	460	615	675	825	1240	500	35	70	1400	4000	●	●
YMJ53D821K	K	510	670	738	902	1355	500	35	70	1600	3700	●	●
YMJ53D911K	K	550	745	819	1001	1500	500	35	70	1700	3300	●	●
YMJ53D951K	K	575	760	855	1045	1565	500	35	70	1800	3200	●	●
YMJ53D102K	K	625	825	900	1100	1650	500	35	70	1890	3000	●	●
YMJ53D112K	K	680	895	990	1210	1815	500	35	70	2050	2700	●	●
YMJ53D122K	K	750	990	1080	1320	1980	500	35	70	2160	2500	●	●

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