

Description

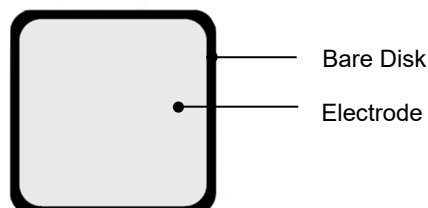
Metal Oxide Varistor (MOV) is a nonlinear resistance component with zinc oxide (ZnO) as its main constituent. The resistance of an MOV is sensitive to changes in the applied voltage. Below the threshold voltage, the MOV exhibits high resistance, allowing only a negligibly small leakage current to flow.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



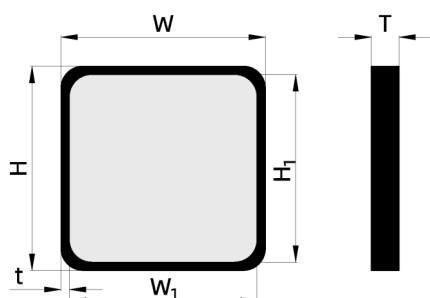
Product Structure



Agency Approvals

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

Dimensions



W	W ₁	H	H ₁	t (min.)
32.8±0.8	30.6±0.5	32.8±0.8	30.6±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)		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)		
YMJ34S241K	T	150	200	216	264	395	300	20	40	8.0	480	5650
YMJ34S271K	T	175	225	243	297	455	300	20	40	8.0	540	5100
YMJ34S301K	T	190	250	270	330	500	300	20	40	8.0	600	4510
YMJ34S331K	T	210	275	297	363	550	300	20	40	8.0	656	4150
YMJ34S361K	T	230	300	324	396	595	300	20	40	8.0	745	3750
YMJ34S391K	T	250	320	351	429	650	300	20	40	8.0	830	3500
YMJ34S431K	T	275	350	387	473	710	300	20	40	8.0	920	2950
YMJ34S471K	T	300	385	423	517	775	300	20	40	8.0	1000	2880
YMJ34S511K	T	320	415	459	561	845	300	20	40	8.0	1060	2650
YMJ34S561K	T	350	460	504	616	925	300	20	40	7.5	1150	2450
YMJ34S621K	T	385	505	558	682	1025	300	20	40	7.5	1250	2200
YMJ34S681K	T	420	560	612	748	1120	300	20	40	6.5	1250	2000
YMJ34S711K	T	440	585	639	781	1170	300	20	40	6.5	1250	1900
YMJ34S751K	T	460	615	675	825	1240	300	20	40	6.5	1280	1820
YMJ34S821K	T	510	670	738	902	1355	300	20	40	5.0	1300	1800
YMJ34S911K	T	550	745	819	1001	1500	300	20	40	5.0	1475	1500
YMJ34S951K	T	575	760	855	1045	1565	300	20	40	5.0	1500	1400
YMJ34S102K	T	625	825	900	1100	1650	300	20	40	3.5	1550	1350
YMJ34S112K	T	680	895	990	1210	1815	300	20	40	3.5	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
		○	○	○	○	420	560	385	505
	100V	○	○	○	○	350	460	320	415
		○	○	○	○	300	385	275	350
	240V	○	○	○	○	250	320	230	300
		○	○	○	○	210	275	190	250
	100V	○	○	○	○	175	225	150	200
		○	○	○	○	140	180	130	170
220V	○	○	○	○	115	150	95	125	
	○	○	○	○	75	100	60	85	
100V	○	○	○	○	50	65	40	56	
	○	○	○	○	35	45	30	38	
250V	○	○	○	○	25	31	20	26	
	○	○	○	○	17	22	14	18	
120V	○	○	○	○	14	18			
	○	○	○	○					
125V	○	○	○	○					
	○	○	○	○					
48V	○	○	○	○					
	○	○	○	○					
24V	○	○	○	○					
	○	○	○	○					
12V	○	○	○	○					
	○	○	○	○					
AC	DC						AC	DC	

Maximum Peak Current (8/20 μ s) (kA)