

### Description

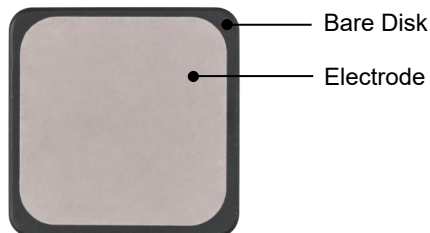
Metal Oxide Varistor (MOV) is a nonlinear resistance component with zinc oxide (ZnO) as its main constituent. The resistance of an MOV is sensitive to changes in the applied voltage. Below the threshold voltage, the MOV exhibits high resistance, allowing only a negligibly small leakage current to flow. 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 15 kA to 40 kA, and maximum continuous voltage ratings from 50VAC to 750 VAC. Safety certification includes UL, cUL, and complies with RoHS and REACH requirements.



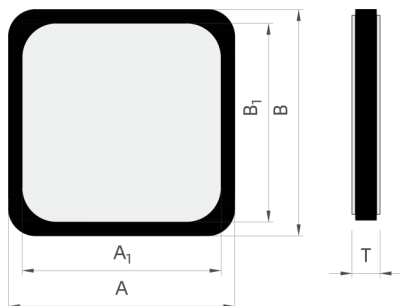
### Product Structure



### Agency Approvals

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

### Dimensions



Series	Symbol	Dimensions (mm)
YMJ34S	A	32.4 - 33.7
	B	
	A <sub>1</sub>	29.0 ± 0.6
	B <sub>1</sub>	
	T	See specification

**Specification**

Model	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	T	Agency Information	
	VAC	VDC	Min.	Max.	V <sub>c</sub>	I <sub>p</sub>	I <sub>n</sub>	I <sub>max</sub>	(J)	(pF)	(mm)	UL	cUL
	(V)	(V)	(V)	(V)	(V)	(A)	(kA)	(kA)				UL	cUL
YMJ34S820K	50	65	74	90	135	300	20	40	156	17950	0.7 ~ 1.1	●	●
YMJ34S101K	60	85	90	110	165	300	20	40	195	15000	0.8 ~ 1.2	●	●
YMJ34S121K	75	100	108	132	200	300	20	40	235	12200	1.0 ~ 1.5	●	●
YMJ34S151K	95	125	135	165	250	300	20	40	296	10000	1.2 ~ 1.9	●	●
YMJ34S181K	115	150	162	198	300	300	20	40	350	8250	0.9 ~ 1.2	●	●
YMJ34S201K	130	170	180	220	340	300	20	40	400	6750	1.0 ~ 1.3	●	●
YMJ34S221K	140	180	198	242	360	300	20	40	450	6400	1.1 ~ 1.5	●	●
YMJ34S241K	150	200	216	264	395	300	20	40	480	5650	1.2 ~ 1.6	●	●
YMJ34S271K	175	225	243	297	455	300	20	40	540	5100	1.4 ~ 1.8	●	●
YMJ34S301K	190	250	270	330	500	300	20	40	600	4510	1.5 ~ 2.0	●	●
YMJ34S331K	210	275	297	363	550	300	20	40	656	4150	1.7 ~ 2.2	●	●
YMJ34S361K	230	300	324	396	595	300	20	40	745	3750	1.9 ~ 2.4	●	●
YMJ34S391K	250	320	351	429	650	300	20	40	830	3500	2.1 ~ 2.6	●	●
YMJ34S431K	275	350	387	473	710	300	20	40	920	2950	2.2 ~ 2.8	●	●
YMJ34S471K	300	385	423	517	775	300	20	40	1000	2880	2.4 ~ 3.1	●	●
YMJ34S511K	320	415	459	561	845	300	20	40	1060	2650	2.6 ~ 3.3	●	●
YMJ34S561K	350	460	504	616	925	300	20	40	1150	2450	2.9 ~ 3.7	●	●
YMJ34S621K	385	505	558	682	1025	300	20	40	1250	2200	3.2 ~ 4.0	●	●
YMJ34S681K	420	560	612	748	1120	300	20	40	1250	2000	3.5 ~ 4.4	●	●
YMJ34S751K	460	615	675	825	1240	300	20	40	1280	1820	3.9 ~ 4.9	●	●
YMJ34S821K	510	670	738	902	1355	300	20	40	1300	1800	4.3 ~ 5.3	●	●
YMJ34S911K	550	745	819	1001	1500	300	20	40	1475	1500	4.8 ~ 5.9	●	●
YMJ34S102K	625	825	900	1100	1650	300	20	40	1550	1350	5.2 ~ 6.5	●	●
YMJ34S112K	680	895	990	1210	1815	300	20	40	1750	1230	5.8 ~ 7.1	●	●
YMJ34S122K	750	1000	1080	1320	1980	300	20	40	2000	1135	6.3 ~ 7.8	●	●

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

**Metal Oxide Varistor (MOV) Feature & Model List Overview**

Nominal Operating Voltage $U_n$ (V)												Page		Model	Maximum Continuous Operating Voltage $U_n$ (V)	
		0.5	1	1.75	2	3	3.5	6	10	20	70	AC	DC			
480V	500V							SFV10D122K(T)	SFV14D122K(T)	SFV20D122K(T)	SFV25D122K(T)	SFV53D122K	750	990	Maximum Continuous Operating Voltage $U_n$ (V)	
								SFV10D112K(T)	SFV14D112K(T)	SFV20D112K(T)	SFV25D112K(T)	SFV53D112K	680	895		
415V								SFV10D102K(T)	SFV14D102K(T)	SFV20D102K(T)	SFV25D102K(T)	SFV53D102K	625	825		
380V								SFV10D911K(T)	SFV14D911K(T)	SFV20D911K(T)	SFV25D911K(T)	SFV53D911K	550	745		
				SFV7D821K(T)				SFV10D821K(T)	SFV14D821K(T)	SFV20D821K(T)	SFV25D821K(T)	SFV53D821K	510	670		
100V	250V							SFV10D751K(T)	SFV14D751K(T)	SFV20D751K(T)	SFV25D751K(T)	SFV53D751K	460	615		
								SFV10D681K(T)	SFV14D681K(T)	SFV20D681K(T)	SFV25D681K(T)	SFV53D681K	420	560		
240V								SFV10D621K(T)	SFV14D621K(T)	SFV20D621K(T)	SFV25D621K(T)	SFV53D621K	385	505		
								SFV10D561K(T)	SFV14D561K(T)	SFV20D561K(T)	SFV25D561K(T)	SFV53D561K	350	460		
100V	125V							SFV10D511K(T)	SFV14D511K(T)	SFV20D511K(T)	SFV25D511K(T)	SFV53D511K	320	415		
								SFV10D471K(T)	SFV14D471K(T)	SFV20D471K(T)	SFV25D471K(T)	SFV53D471K	300	385		
220V								SFV10D431K(T)	SFV14D431K(T)	SFV20D431K(T)	SFV25D431K(T)	SFV53D431K	275	350		
								SFV10D391K(T)	SFV14D391K(T)	SFV20D391K(T)	SFV25D391K(T)	SFV53D391K	250	320		
100V	120V							SFV10D361K(T)	SFV14D361K(T)	SFV20D361K(T)	SFV25D361K(T)	SFV53D361K	230	300		
								SFV10D331K(T)	SFV14D331K(T)	SFV20D331K(T)	SFV25D331K(T)	SFV53D331K	210	275		
100V	100V							SFV10D301K(T)	SFV14D301K(T)	SFV20D301K(T)	SFV25D301K(T)	SFV53D301K	190	250		
								SFV10D271K(T)	SFV14D271K(T)	SFV20D271K(T)	SFV25D271K(T)	SFV53D271K	175	225		
48V	24V							SFV10D241K(T)	SFV14D241K(T)	SFV20D241K(T)	SFV25D241K(T)	SFV53D241K	150	200		
								SFV10D221K(T)	SFV14D221K(T)	SFV20D221K(T)	SFV25D221K(T)	SFV53D221K	140	180		
24V	12V							SFV10D201K(T)	SFV14D201K(T)	SFV20D201K(T)	SFV25D201K(T)	SFV53D201K	130	170		
								SFV10D181K(T)	SFV14D181K(T)	SFV20D181K(T)	SFV25D181K(T)	SFV53D181K	115	150		
12V	12V							SFV10D151K(T)	SFV14D151K(T)	SFV20D151K(T)	SFV25D151K(T)	SFV53D151K	95	125		
								SFV10D121K(T)	SFV14D121K(T)	SFV20D121K(T)	SFV25D121K(T)	SFV53D121K	75	100		
AC	DC							SFV10D101K(T)	SFV14D101K(T)	SFV20D101K(T)	SFV25D101K(T)	SFV53D101K	60	85		
								SFV10D820K(T)	SFV14D820K(T)	SFV20D820K(T)	SFV25D820K(T)	SFV53D820K	50	65		
AC	DC							SFV7D680K(T)	SFV10D680K(T)		SFV14D680K(T)	SFV20D680K(T)	SFV25D680K(T)		40	56
								SFV7D560K(T)	SFV10D560K(T)		SFV14D560K(T)	SFV20D560K(T)	SFV25D560K(T)		35	45
AC	DC							SFV7D470K(T)	SFV10D470K(T)		SFV14D470K(T)	SFV20D470K(T)	SFV25D470K(T)		30	38
								SFV7D390K(T)	SFV10D390K(T)		SFV14D390K(T)	SFV20D390K(T)	SFV25D390K(T)		25	31
AC	DC							SFV7D330K(T)	SFV10D330K(T)		SFV14D330K(T)	SFV20D330K(T)	SFV25D330K(T)		20	26
								SFV7D270K(T)	SFV10D270K(T)		SFV14D270K(T)	SFV20D270K(T)	SFV25D270K(T)		17	22
AC	DC							SFV7D220K(T)	SFV10D220K(T)		SFV14D220K(T)	SFV20D220K(T)	SFV25D220K(T)		14	18

**Metal Oxide Varistor (MOV) Feature & Model List Overview**

Nominal Operating Voltage $U_n$ (V)						Page		Model	Maximum Continuous Operating Voltage $U_n$ (V)	
		1.75	3.5	6	10	20	AC		DC	
480V	500V	○	SFV10D122KM	SFV14D122KM	SFV20D122KM	SFV25D122KM	750	990	Maximum Continuous Operating Voltage $U_n$ (V)	
		○	SFV10D112KM	SFV14D112KM	SFV20D112KM	SFV25D112KM	680	895		
		○	SFV10D102KM	SFV14D102KM	SFV20D102KM	SFV25D102KM	625	825		
		○	SFV10D911KM	SFV14D911KM	SFV20D911KM	SFV25D911KM	550	745		
380V	500V	SFV7D821KM	SFV10D821KM	SFV14D821KM	SFV20D821KM	SFV25D821KM	510	670		
		SFV7D751KM	SFV10D751KM	SFV14D751KM	SFV20D751KM	SFV25D751KM	460	615		
100V	240V	SFV7D681KM	SFV10D681KM	SFV14D681KM	SFV20D681KM	SFV25D681KM	420	560		
		SFV7D621KM	SFV10D621KM	SFV14D621KM	SFV20D621KM	SFV25D621KM	385	505		
240V	240V	SFV7D561KM	SFV10D561KM	SFV14D561KM	SFV20D561KM	SFV25D561KM	350	460		
		SFV7D511KM	SFV10D511KM	SFV14D511KM	SFV20D511KM	SFV25D511KM	320	415		
100V	250V	SFV7D471KM	SFV10D471KM	SFV14D471KM	SFV20D471KM	SFV25D471KM	300	385		
		SFV7D431KM	SFV10D431KM	SFV14D431KM	SFV20D431KM	SFV25D431KM	275	350		
100V	250V	SFV7D391KM	SFV10D391KM	SFV14D391KM	SFV20D391KM	SFV25D391KM	250	320		
		SFV7D361KM	SFV10D361KM	SFV14D361KM	SFV20D361KM	SFV25D361KM	230	300		
120V	250V	SFV7D331KM	SFV10D331KM	SFV14D331KM	SFV20D331KM	SFV25D331KM	210	275		
		SFV7D301KM	SFV10D301KM	SFV14D301KM	SFV20D301KM	SFV25D301KM	190	250		
100V	125V	SFV7D271KM	SFV10D271KM	SFV14D271KM	SFV20D271KM	SFV25D271KM	175	225		
		SFV7D241KM	SFV10D241KM	SFV14D241KM	SFV20D241KM	SFV25D241KM	150	200		
48V	125V	SFV7D221KM	SFV10D221KM	SFV14D221KM	SFV20D221KM	SFV25D221KM	140	180		
		SFV7D201KM	SFV10D201KM	SFV14D201KM	SFV20D201KM	SFV25D201KM	130	170		
48V	125V	SFV7D181KM	SFV10D181KM	SFV14D181KM	SFV20D181KM	SFV25D181KM	115	150		
		SFV7D151KM	SFV10D151KM	SFV14D151KM	SFV20D151KM	SFV25D151KM	95	125		
24V	12V	SFV7D121KM	SFV10D121KM	SFV14D121KM	SFV20D121KM	SFV25D121KM	75	100		
		SFV7D101KM	SFV10D101KM	SFV14D101KM	SFV20D101KM	SFV25D101KM	60	85		
24V	12V	SFV7D820KM	SFV10D820KM	SFV14D820KM	SFV20D820KM	SFV25D820KM	50	65		
		○	○	SFV25D680KM	○	○	40	56		
12V	12V	○	○	SFV25D560KM	○	○	35	45		
		○	○	SFV25D470KM	○	○	30	38		
12V	12V	○	○	○	○	○	25	31		
		○	○	○	○	○	20	26		
AC	DC	○	○	○	○	○	17	22		
		○	○	○	○	○	14	18		



**Metal Oxide Varistor (MOV) Feature & Model List Overview**

Nominal Operating Voltage $U_n$ (V)		Maximum Peak Current (8/20 $\mu$ s) (kA)											Page		Model	Maximum Continuous Operating Voltage $U_n$ (V)
		2	3	5	6	8	10	15	20	25	40	AC	DC			
480V	500V									SFV20S122K		SFV25S122K	SFV34S122K	750	990	Maximum Continuous Operating Voltage $U_n$ (V)
										SFV20S112K		SFV25S112K	SFV34S112K	680	895	
415V	500V									SFV20S102K		SFV25S102K	SFV34S102K	625	825	
										SFV20S911K		SFV25S911K	SFV34S911K	550	745	
380V	500V			SFV10S821K					SFV15S821K	SFV20S821K		SFV25S821K	SFV34S821K	510	670	
				SFV10S751K					SFV15S751K	SFV20S751K		SFV25S751K	SFV34S751K	460	615	
100V	-			SFV10S681K					SFV15S681K	SFV20S681K		SFV25S681K	SFV34S681K	420	560	
				SFV10S621K					SFV15S621K	SFV20S621K		SFV25S621K	SFV34S621K	385	505	
240V	-			SFV10S561K					SFV15S561K	SFV20S561K		SFV25S561K	SFV34S561K	350	460	
				SFV10S511K					SFV15S511K	SFV20S511K		SFV25S511K	SFV34S511K	320	415	
100V	250V			SFV10S471K					SFV15S471K	SFV20S471K		SFV25S471K	SFV34S471K	300	385	
				SFV10S431K					SFV15S431K	SFV20S431K		SFV25S431K	SFV34S431K	275	350	
220V	250V			SFV10S391K					SFV15S391K	SFV20S391K		SFV25S391K	SFV34S391K	250	320	
				SFV10S361K					SFV15S361K	SFV20S361K		SFV25S361K	SFV34S361K	230	300	
100V	-			SFV10S331K					SFV15S331K	SFV20S331K		SFV25S331K	SFV34S331K	210	275	
				SFV10S301K					SFV15S301K	SFV20S301K		SFV25S301K	SFV34S301K	190	250	
120V	-			SFV10S271K					SFV15S271K	SFV20S271K		SFV25S271K	SFV34S271K	175	225	
				SFV10S241K					SFV15S241K	SFV20S241K		SFV25S241K	SFV34S241K	150	200	
100V	-			SFV10S221K					SFV15S221K	SFV20S221K		SFV25S221K	SFV34S221K	140	180	
				SFV10S201K					SFV15S201K	SFV20S201K		SFV25S201K	SFV34S201K	130	170	
48V	-			SFV10S181K					SFV15S181K	SFV20S181K		SFV25S181K	SFV34S181K	115	150	
				SFV10S151K					SFV15S151K	SFV20S151K		SFV25S151K	SFV34S151K	95	125	
24V	-		SFV10S121K						SFV15S121K	SFV20S121K		SFV25S121K	SFV34S121K	75	100	
			SFV10S101K						SFV15S101K	SFV20S101K		SFV25S101K	SFV34S101K	60	85	
12V	-		SFV10S820K						SFV15S820K	SFV20S820K		SFV25S820K	SFV34S820K	50	65	
		SFV10S680K	SFV15S680K	SFV20S680K				SFV25S680K		SFV34S680K				40	56	
12V	-	SFV10S560K	SFV15S560K	SFV20S560K			SFV25S560K		SFV34S560K				35	45		
		SFV10S470K	SFV15S470K	SFV20S470K			SFV25S470K		SFV34S470K				30	38		
12V	-	SFV10S390K	SFV15S390K SFV20S390K				SFV25S390K						25	31		
		SFV10S330K	SFV15S330K SFV20S330K				SFV25S330K						20	26		
12V	-	SFV10S270K	SFV15S270K SFV20S270K			SFV25S270K							17	22		
		SFV10S220K	SFV15S220K SFV20S220K SFV25S220K										14	18		