

Radial Lead Varistor (MOV)

Description

22S series transient surge suppressors are industrial high energy Metal-Oxide Varistors (MOVs). They are designed to provide secondary surge protection in the outdoor and service entrance environment (distribution panels) of buildings, and also in industrial applications for motor controls and power supplies used in the oil-drilling, mining, and transportation fields.

The maximum peak surge current rating can reach up to 20KA (8/20μs pulse) to protect against high peak surges, including indirect lightning strike interference, system switching transients and abnormal fast transients from the power source.

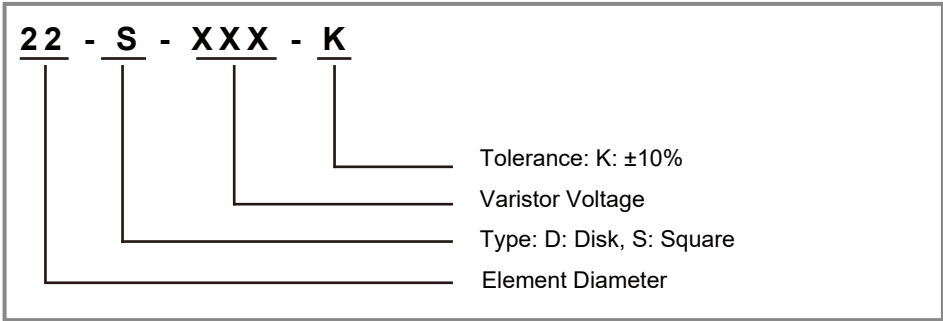
Features

- ◆ Wide operating voltage (V1mA) range from 180V to 1800V
- ◆ Fast responding to transient over-voltage
- ◆ Large absorbing transient energy capability
- ◆ Low clamping ratio and no follow-on current
- ◆ Meets MSL level 1, per J-STD-020
- ◆ Large absorbing transient energy capability

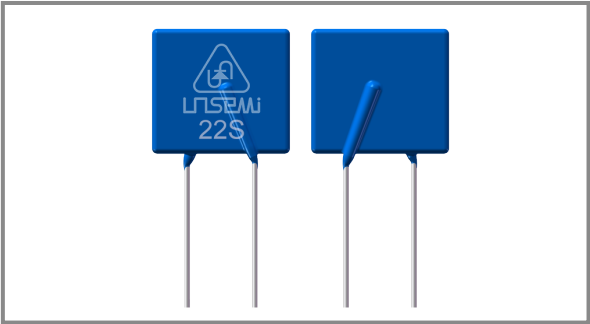
General Characteristics

Material	No Radioactive Material
Operating Temperature	-40~85°C~125°C
Storage Temperature	-40~125°C~150°C

Part Numbering



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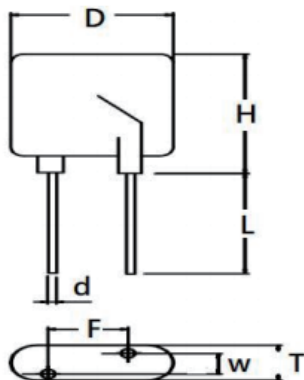
Applicable

- ◆ Transistor, Diode, IC, Thyristor or Triac semiconductor protection
- ◆ Surge protection in consumer electronics
- ◆ Surge protection in industrial electronics
- ◆ Surge protection in electronic home appliances, gas and petroleum appliances
- ◆ Relay and electromagnetic valve surge absorption

Specifications – General Characteristics (25±5°C)

Part Number	Maximum Allowable Voltage		Varistor Voltage	Withstanding Surge Current 8/20μS	Max Clamping Voltage		Energy (10/1000μs)	Rated Power	Typical Capacitance (Reference)
	V <sub>AC</sub> (V)	V <sub>DC</sub> (V)			V <sub>C</sub> (V)	I <sub>P</sub> (A)			
22S181K	115	150	180(162~198)	20000	300	150	175	1.2	3500
22S201K	130	170	200(185~255)	20000	330	150	190	1.2	3200
22S221K	140	180	220(198~242)	20000	360	150	200	1.2	2900
22S241K	150	200	240(216~264)	20000	395	150	220	1.2	2650
22S271K	175	225	270(243~297)	20000	455	150	255	1.2	2400
22S301K	190	250	300(270~330)	20000	505	150	275	1.2	2100
22S331K	210	275	330(297~363)	20000	550	150	300	1.2	1900
22S361K	230	300	360(324~396)	20000	595	150	330	1.2	1750
22S391K	250	320	390(351~429)	20000	650	150	360	1.2	1600
22S431K	275	350	430(387~473)	20000	710	150	380	1.2	1500
22S471K	300	385	470(423~517)	20000	775	150	400	1.2	1400
22S511K	320	415	510(459~561)	20000	845	150	420	1.2	1250
22S561K	350	460	560(504~616)	20000	920	150	440	1.2	1150
22S621K	385	505	620(558~682)	20000	1025	150	450	1.2	1050
22S681K	420	560	680(612~748)	20000	1120	150	460	1.2	950
22S751K	460	615	750(675~825)	20000	1240	150	510	1.2	850
22S781K	485	640	780(702~858)	20000	1290	150	530	1.2	850
22S821K	510	670	820(738~902)	20000	1355	150	570	1.2	500
22S911K	550	745	910(819~1001)	20000	1500	150	620	1.2	700
22S102K	625	825	1000(900~1100)	20000	1650	150	685	1.2	650
22S112K	680	895	1100(990~1210)	20000	1815	150	720	1.2	600
22S122K	750	990	1200(1080~1320)	20000	1980	150	795	1.2	550
22S142K	880	1140	1400(1260~1540)	20000	2310	150	850	1.2	500
22S162K	1000	1280	1600(1400~1760)	20000	2640	150	970	1.2	450
22S182K	1100	1465	1800(1620~1980)	20000	2970	150	1092	1.2	400

Dimensions Unit: mm



Part Number	T Max.	D Max.	H Max.		L	F	d
			S	I/C/Y		±1.0	±0.05
22S181K	5.2	28.0	32.5	35.5	25.0	12.7	1.0
22S201K	5.4						
22S221K	5.5						
22S241K	5.6						
22S271K	5.7						
22S301K	5.8						
22S331K	6.0						
22S361K	6.1						
22S391K	6.2						
22S431K	6.3						
22S471K	6.4						
22S511K	6.6						
22S561K	7.0						
22S621K	7.4						
22S681K	7.8						
22S751K	8.2						
22S781K	8.4						
22S821K	8.8						
22S911K	9.2						
22S102K	9.5						
22S112K	9.8						
22S122K	10.5						
22S142K	10.9						
22S162K	11.8						
22S182K	13.5						

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