

Metal Oxide Varistors (MOV)

Features

·Wide operating voltage (V1mA) range from 33V 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

·Operating Temperature: -40℃ ~ +85℃

·Storage Temperature: -40℃ ~ +125℃



Electrical Characteristics

Part Number	Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage	Rated Voltage	Maximum peak Current 8/20μs		Maximum Energy (10/1000μs)	Typical Capacitance (Reference)
	V _{AC}	V _{DC}				I _{n 10times}	I _{max}		
MOV	V _{AC}	V _{DC}	V _{1mA} (V)	V _C AT 175A	reference			(J)	1KHz(pf)
22S330KA	20	26V	33V(30~37)	65V	DC 12V	4KA	8KA	42J	24500pf
22S390KA	25	31V	39V(35~44)	77V	DC 12V	4KA	8KA	49J	21000pf
22S470KA	30V	38V	47V(42~52)	93V	DC 24V	5KA	10KA	60J	17250pf
22S560KA	35V	45V	56V(50~63)	110V	DC 24V	5KA	10KA	72J	14500pf
22S680KA	40V	56V	68V(61~75)	135V	DC 24V	5KA	10KA	85J	9500pf
22S820KA	50V	65V	82V(74~90)	135V	DC 48V	10KA	18KA	98J	8800pf
22S101KA	60V	85V	100V(90~110)	165V	DC 48V	12KA	25KA	122J	7200pf
22S121KA	75V	100V	120V(108~132)	200V	DC 60V	12KA	25KA	146J	6000pf
22S151KA	95V	125V	150V(135~165)	250V	DC 60V	12KA	25KA	185J	4400pf
22S181KA	115V	150V	180V(162~198)	300V	AC 100V	12KA	25KA	218J	3650pf
22S201KA	130V	170V	200V(180~220)	340V	AC 125V	12KA	25KA	252J	3300pf
22S221KA	140V	180V	220V(198~242)	360V	AC 125V	12KA	25KA	280J	3000pf
22S241KA	150V	200V	240V(216~264)	395V	AC 125V	12KA	25KA	302J	2800pf
22S271KA	175V	225V	270V(243~297)	455V	AC 125V	12KA	25KA	340J	2450pf
22S301KA	190V	250V	300V(270~330)	500V	AC 125V	12KA	25KA	375J	2200pf
22S331KA	210V	275V	330V(297~363)	550V	AC 250V	12KA	25KA	410J	2050pf
22S361KA	230V	300V	360V(324~396)	595V	Telephone test	12KA	25KA	465J	1850pf
22S391KA	250V	320V	390V(351~429)	650V		12KA	25KA	520J	1700pf
22S431KA	275V	350V	430V(387~473)	710V	AC 250V	12KA	25KA	575J	1600pf
22S471KA	300V	385V	470V(423~517)	775V	AC 250V	12KA	25KA	630J	1450pf

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Part Number	Maximum Allowable Voltage		Varistor Voltage	Maximum Clamping Voltage	Rated Voltage	Maximum peak Current 8/20μs		Maximum Energy (10/1000μs)	Typical Capacitance (Reference)
MOV	V _{AC}	V _{DC}	V _{1mA} (V)	V _C AT 175A	reference	I _n 10times	I _{max}	(J)	1KHz(pf)
22S511KA	320V	415V	510V(459~561)	845V	AC 250V	12KA	25KA	665J	1300pf
22S561KA	350V	460V	560V(504~616)	925V	AC 250V	12KA	25KA	720J	1200pf
22S621KA	385V	505V	620V(558~682)	1025V	AC 250V	12KA	25KA	790J	1100pf
22S681KA	420V	560V	680V(612~748)	1120V	AC 250V	12KA	25KA	790J	1000pf
22S711KA	440V	585V	710V(644~786)	1180V	AC 250V	12KA	25KA	825J	950pf
22S751KA	460V	615V	750V(675~825)	1240V	AC 250V	12KA	25KA	825J	900pf
22S781KA	485V	640V	780V(702~858)	1290V	AC 250V	12KA	25KA	860J	850pf
22S821KA	510V	670V	820V(738~902)	1355V	AC 380V	10KA	20KA	900J	810pf
22S911KA	550V	745V	910V(819~1001)	1500V		10KA	20KA	950J	750pf
22S102KA	625V	825V	1000V(900~1100)	1650V		10KA	20KA	10400J	660pf
22S112KA	680V	895V	1100V(990~1210)	1815V		10KA	20KA	1130J	605pf
22S122KA	750V	990V	1200V(1080~1320)	1980V		10KA	20KA	1170J	555pf
22S142KA	850V	1120V	1400V(1260~1540)	2310V	Or G	8KA	16KA	1170J	475pf
22S162KA	1000V	1320V	1600V(1440~1760)	2640V		8KA	16KA	1300J	415pf
22S182KA	1100V	1485V	1800V(1620~1980)	2970V		8KA	16KA	1300J	400pf

Dimension(mm)

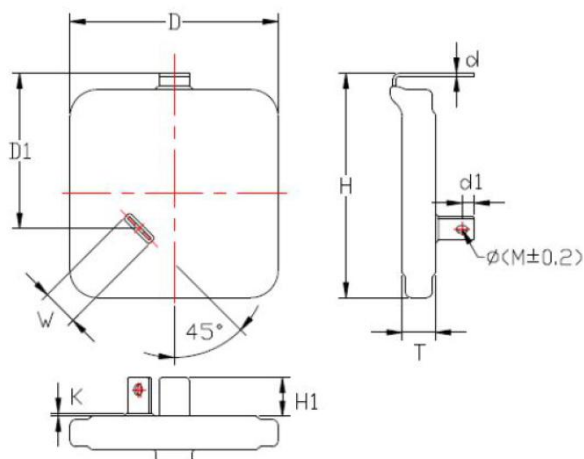


TABLE1		TABLE2 T(±1.0mm)					
Symbol	Dimensions	Part number	T	Part number	T	Part number	T
D(Max)	27.5mm	22S330KA	5.2mm	22S241KA	5.6mm	22S711KA	8.5mm
H(Maz)	27.5mm	22S390KA	5.4mm	22S271KA	5.8mm	22S751KA	8.6mm
A-1(Max)	22.0mm	22S470KA	5.6mm	22S301KA	5.9mm	22S781KA	8.9mm
d-1	1.0mm	22S560KA	5.9mm	22S331KA	6.1mm	22S821KA	9.4mm
T	TABLE2	22S680KA	6.2mm	22S361KA	6.3mm	22S911KA	9.6mm
		22S820KA	5.0mm	22S391KA	6.4mm	22S102KA	9.9mm
		22S101KA	5.2mm	22S431KA	6.7mm	22S112KA	10.4mm
		22S121KA	5.4mm	22S471KA	6.9mm	22S122KA	11.0mm
		22S151KA	5.6mm	22S511KA	7.1mm	22S142KA	10.9mm
		22S181KA	5.9mm	22S561KA	7.4mm	22S162KA	11.8mm
		22S201KA	5.4mm	22S621KA	7.7mm	22S182KA	12.7mm
		22S221KA	5.5mm	22S681KA	8.1mm	--	--