

# CERAMIC SURGE ABSORBERS (VARISTORS)

## SVC

Device Type	Dia (mm)	Vacm (Volts)	Vdcm (Volts)	Wtm (Joules)	Ptam (Watts)	Itm (Amps)	Vnom (Volts)	Tolerance		VC (Volts)	Ip (Amps)	f=1kHz (pF)
								Min (Volts)	Max (Volts)			
SVC 271D-05A	5	175	225	6.0	0.1	250	270	247	303	475	5	150
SVC 271D-07A	7			12.0	0.25	600				455	10	300
SVC 271D-10A	10			30.0	0.4	1250				455	25	600
SVC 271D-14A	14			50.0	0.6	2500				455	50	1200
SVC 271D-20A	20			90.0	1.0	4000				455	100	2400
SVC 361D-05A	5	230	300	7.5	0.1	250	360	324	396	620	5	120
SVC 361D-07A	7			15.0	0.25	600				595	10	250
SVC 361D-10A	10			35.0	0.4	1250				595	25	500
SVC 361D-14A	14			65.0	0.6	2500				595	50	1000
SVC 361D-20A	20			120.0	1.0	4000				595	100	2000
SVC 391D-05A	5	250	320	8.0	0.1	250	390	351	429	675	5	110
SVC 391D-07A	7			17.0	0.25	600				650	10	220
SVC 391D-10A	10			40.0	0.4	1250				650	25	450
SVC 391D-14A	14			70.0	0.6	2500				650	50	900
SVC 391D-20A	20			130.0	1.0	4000				650	100	1800
SVC 431D-05A	5	275	350	9.0	0.1	250	430	387	473	754	5	100
SVC 431D-07A	7			20.0	0.25	600				710	10	200
SVC 431D-10A	10			45.0	0.4	1250				710	25	400
SVC 431D-14A	14			75.0	0.6	2500				710	50	800
SVC 431D-20A	20			140.0	1.0	4000				710	100	1600
SVC 471D-05A	5	300	385	10.0	0.1	250	470	423	517	810	5	80
SVC 471D-07A	7			20.0	0.25	600				775	10	170
SVC 471D-10A	10			45.0	0.4	1250				775	25	350
SVC 471D-14A	14			80.0	0.6	2500				775	50	700
SVC 471D-20A	20			150.0	1.0	4000				775	100	1400
SVC 561D-10A	10	350	460	45.0	0.4	1250	560	504	616	920	25	300
SVC 561D-14A	14			85.0	0.6	2500				920	50	600
SVC 561D-20A	20			150.0	1.0	4000				920	100	1200
SVC 621D-10A	10	385	550	45.0	0.4	1250	620	558	682	1025	25	270
SVC 621D-14A	14			85.0	0.6	2500				1025	50	550
SVC 621D-20A	20			150.0	1.0	4000				1025	100	1100
SVC 681D-10A	10	420	560	45.0	0.4	1250	680	612	748	1120	25	250
SVC 681D-14A	14			90.0	0.6	2500				1120	50	500
SVC 681D-20A	20			160.0	1.0	4000				1120	100	1000
SVC 751D-10A	10	460	615	50.0	0.4	1250	750	675	825	1240	25	220
SVC 751D-14A	14			100.0	0.6	2500				1240	50	450
SVC 751D-20A	20			175.0	1.0	4000				1240	100	900
SVC 781D-10A	10	485	640	50.0	0.4	1250	780	702	858	1290	25	220
SVC 781D-14A	14			105.0	0.6	2500				1290	50	440
SVC 781D-20A	20			180.0	1.0	4000				1290	100	880
SVC 821D-10A	10	510	670	55.0	0.4	1250	820	738	902	1355	25	210
SVC 821D-14A	14			110.0	0.6	2500				1355	50	420
SVC 821D-20A	20			190.0	1.0	4000				1355	100	840
SVC 911D-10A	10	550	745	60.0	0.4	1250	910	819	1001	1500	25	180
SVC 911D-14A	14			120.0	0.6	2500				1500	50	380
SVC 911D-20A	20			215.0	1.0	4000				1500	100	750
SVC 102D-10A	10	625	825	65.0	0.4	1250	1000	900	1100	1650	25	180
SVC 102D-14A	14			130.0	0.6	2500				1650	50	350
SVC 102D-20A	20			230.0	1.0	4000				1650	100	700
SVC 112D-10A	10	680	895	70.0	0.4	1250	1100	990	1210	1815	25	150
SVC 112D-14A	14			140.0	0.6	2500				1815	50	300
SVC 112D-20A	20			250.0	1.0	4000				1815	100	600
SVC 182D-10A	14	1000	1465	24.0	0.6	2500	1800	1620	1980	2970	50	200
SVC 182D-14A	20			400.0	1.0	4000				2970	100	400

### Notes :

- ① The waveform of the maximum DC applied voltage is flat. When a ripple voltage as from a rectifier source is supplied make sure that the peak voltage is kept under the Vdcm.  
An AC applied voltage(50/60Hz) form a sine wavelshape.  
When the distortion in the waveform is extensive make sure that the peak voltage is less than  $\sqrt{2}$ times the Vacm.
- ② Energy : Wtm  
Transient energy ratings are given in the Wtm column of the specifications in Joules (watt-second).  
The rating is the maximum allowable energy for a single impulse of 2ms square-waveform current with continuous voltage applied. Energy ratings are based on a shift of Vnom of less than  $\pm 10\%$  of initial value.
- ③ Transient peak current (Itm)  
The peak current rating. Itm. of varistor is based on an 8/20 $\mu$ s test impulse wavelshape.

This peak current is the maximum peak current in which the nominal varistor voltage shift does not exceed  $\pm 10\%$  when the test impulse is applied twice at 5 minutes intervals.

- ④ Nominal varistor voltage : Vnom  
Indicates the varistor terminal voltage measured with a 1mA DC applied. -0.1mA DC in the case of the 0.5A and 05B series.
  - ⑤ Maximum clamping voltage : Vc  
Indicates the peak terminal voltage measured with an 8/20 $\mu$ s impulse current applied.
- Operating ambient temperature : -40°C to +80°C
  - Storage temperature : -40°C to +125°C
  - UL and CSA recognized (UL 1449, UL 497B or UL 1414, CSA)  
SVC varistors have been tested by Underwriter's Laboratories, Inc. and Canadian Standards Association  
UL File No. E97754, E151195, E154171.  
CSA File No. LR78923.