





SMT SERIES

INTRODUCTION

The SMT Series, designed for Surface Mount applications, are small varistors manufactured in a leadless monoblock form. These Surface Mount varistors have significantly lower profiles then our radial-leaded varistors, thus allowing designers to significantly reduce the size of their PC board designs. The SMT varistors are available in a variety of voltages ranging from 10 to 275 VAC. Dimensions for the SMT varistors are 0.320" x 0.200" with a 0.080" maximum thickness. All sizes are available in Tape and Reel and bulk packaging.

Style Designation

The Maida style number is the primary means to identify our components when ordered. The style number identifies several parameters that are important for the characteristics of the device. Observe the following part numbering system when ordering our components:

- Lead Configuration code 17 – Stands for no leads
- 4. Part Topology Identifier SM – Surface Mount
- 5. AC Voltage Rating code, 2 significant figures plus number of zeroes that follow, e.g. 151 is 150 VAC.

An example of a typical Maida style number is 8S17SM750. This style number displays a Surface Mount component with a rectangular shape of 0.320 x 0.200 inches. The continuous AC voltage rating for this component is 75VAC.

Standard Marking

These parts currently do not have a standard marking. A special marking is available upon request.

How to Order the SMT Series

The following specifications table provides a way to match the Maida style number to a SMT varistor that provides the necessary specifications for a specific application. All SMT varistors are shipped in Tape and Reel packaging. To order in bulk packaging, apply a "B" at the end of the style number. Contact our engineering department for additional information.

For more information call us at (757) 723-0785.

SMT SERIES

SPECIFICATIONS

Maida Style Number Recognitions To Safety Agency Standards Minimum Marking Maxing CONTINUOUS TRANSIENT (a x 1000) Peak (a x 20 µsec) Varisor (@1 m A DC) Max Clamping (@Test Current) Typi (a x 20 µsec) A B C D E F (AC) (DC) (J) (A) Voltage (@Test Current) (QTest	IU TO E / 3 VAL VARISTORS															
Maida Style Number Recognitions To Safety Number Minimum Agency Standards Minimum Marking Mapplied Voltage TRANSIENT Energy Voltage Peak Current # Pulses Varistor Voltage Max Clamping Voltage Typi Car (@Test Current) A B C D E F (AC) (DC) (J) (A) (V) (V) (V) (A) (PF 8 S175M100 X I I 10 14 0.6 250 14.4 21.6 42 5 200 8 S175M140 X I I 10 14 0.8 250 18.7 26 47 5 166 8 S175M170 X I I I 17 22 1 250 23 31.1 57 5 130 8 S175M200 X I I I 20 26 1.2 250 29.5 36.5 68 5 110 8 S175M350 X I I I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII								Maximum Ratings				Electrical Characteristics				
Maida Style Number To Safety Agency Standards Minimum Marking Applied Voltage Energy Voltage Peak Current 8 x 20 µsec Varistor (@1 mA DC Clamping Voltage (@1 mA DC Typi (@Test Current) A B C D E F (AC) (DC) (J) (A) (V) (V) (V) (A) (V) (V) (A) (V) (V) (A) <		Recognitions				s		CONTINUOUS		TRANSIENT				Max		
Maida Style Number Safety Agency Standards Minimum Marking Applied Voltage Energy Uoltage Current 8 x 20 µsec # Pulses Voltage (@1 m A DC Voltage (@1 m A DC Voltage (@Test Current) Car (@Test Current) A B C D E F (AC) (DC) (J) (A) (V) (V) (V) (A) (V) (A) (V) (V) (A) (V) (A) (V) (A) (V) (V) (A) (V) (A) (V) (V) (A) (A) </td <td></td> <td colspan="3">То</td> <td></td> <td colspan="2"></td> <td colspan="2">Peak</td> <td colspan="2">Varistor</td> <td colspan="2">Clamping</td> <td>Typical</td>		То						Peak		Varistor		Clamping		Typical		
Style Number Agency Standards Marking Voltage $a > 20 \ \mu sec$ $a >$	Maida	Safety			ty		Minimum	Applied Voltage		Energy Current		Voltage		Voltage		Cap.
Number Standards IO x 1000 µsec # Pulses IV r 1V r A B C D E F (AC) (DC) (J) (A) (V) (V) (Q) (Q) 8S17SM100 X Image: Constraint of the participation of the partingeneticatenequality of the partingenequality of the partingenequ	Style	Agency			су		Marking				8 x 20 µsec	@1 mA DC		(@Test Current)		
A B C D E (AC) (DC) (J) (A) (V) (V) (V) (A) (pF) 8S17SM100 X <td< td=""><td>Number</td><td colspan="3">Standards</td><td>irds</td><td></td><td></td><td>10 x 1000</td><td># Pulses</td><td>1 V rms</td></td<>	Number	Standards			irds					10 x 1000	# Pulses					1 V rms
A B C D E F (AC) (DC) (J) (A) (V) (V) (V) (A) (pF 8S17SM100 X										µsec	1	Vmin	Vmax	(8 x 20	0µsec) @1kHz	
8S17SM100 X 10 14 0.6 250 14.4 21.6 42 5 200 8S17SM140 X 1 14 18 0.8 250 18.7 26 47 5 160 8S17SM170 X 1 17 22 1 250 23 31.1 57 5 130 8S17SM200 X 1 20 26 1.2 250 29.5 36.5 68 5 110 8S17SM200 X 1 20 26 1.2 250 29.5 36.5 68 5 110 8S17SM300 X 1 20 26 1.2 250 35 43 79 5 90 8S17SM300 X 1 30 38 1.8 250 42 52 92 5 80 8S17SM300 X 1 35 45 2.3 250 50 62 107 5 70 8S17SM400 X 1 40 56		AE	3 0) E	F		(AC)	(DC)	(J)	(A)	(V)	(V)	(V)	(A)	(pF)
8S17SM140 X 14 18 0.8 250 18.7 26 47 5 160 8S17SM170 X 17 22 1 250 23 31.1 57 5 130 8S17SM200 X 1 20 26 1.2 250 29.5 36.5 68 5 110 8S17SM200 X 1 20 26 1.2 250 29.5 36.5 68 5 110 8S17SM250 X 1 25 31 1.5 250 35 43 79 5 900 8S17SM300 X 1 30 38 1.8 250 42 52 92 5 800 8S17SM300 X 1 35 45 2.3 250 50 62 107 5 700 8S17SM400 X 1 40 56 3 250 61 75 127 5 600 8S17SM500 X 1 60 81 5	8S17SM100	Х						10	14	0.6	250	14.4	21.6	42	5	2000
8S17SM170 X 17 22 1 250 23 31.1 57 5 130 8S17SM200 X 1 20 26 1.2 250 29.5 36.5 68 5 110 8S17SM250 X 1 20 26 1.2 250 29.5 36.5 68 5 110 8S17SM300 X 1 25 31 1.5 250 35 43 79 5 900 8S17SM300 X 1 30 38 1.8 250 42 52 92 5 800 8S17SM350 X 1 35 45 2.3 250 50 62 107 5 700 8S17SM400 X 1 40 56 3 250 61 75 127 5 600 8S17SM500 X 1 60 81 5 500 90 110 165 10 400 8S17SM500 X 1 60 81	8S17SM140	Х						14	18	0.8	250	18.7	26	47	5	1600
8S17SM200 X 20 26 1.2 250 29.5 36.5 68 5 110 8S17SM250 X 25 31 1.5 250 35 43 79 5 90 8S17SM300 X 30 38 1.8 250 42 52 92 5 80 8S17SM300 X 30 38 1.8 250 42 52 92 5 80 8S17SM350 X 35 45 2.3 250 50 62 107 5 70 8S17SM400 X 40 56 3 250 61 75 127 5 60 8S17SM500 X 40 50 66 4 500 74 91 135 10 50 8S17SM600 X 40 50 66 4 500 10 10 30 8S17SM750 X 40 60 81 5 500 108 132 200 10 30	8S17SM170	Х						17	22	1	250	23	31.1	57	5	1300
8S17SM250 X 1 25 31 1.5 250 35 43 79 5 90 8S17SM300 X 1 30 38 1.8 250 42 52 92 5 80 8S17SM300 X 1 30 38 1.8 250 42 52 92 5 80 8S17SM350 X 1 35 45 2.3 250 50 62 107 5 70 8S17SM400 X 1 40 56 3 250 61 75 127 5 60 8S17SM500 X 1 50 66 4 500 74 91 135 10 50 8S17SM600 X 1 60 81 5 500 90 110 165 10 40 8S17SM750 X 1 75 102 6 500 108 132 200 10 30 8S17SM950 X 1 95 127 <td>8S17SM200</td> <td>Х</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20</td> <td>26</td> <td>1.2</td> <td>250</td> <td>29.5</td> <td>36.5</td> <td>68</td> <td>5</td> <td>1100</td>	8S17SM200	Х						20	26	1.2	250	29.5	36.5	68	5	1100
8817SM300 X X 30 38 1.8 250 42 52 92 5 80 8817SM350 X X 35 45 2.3 250 50 62 107 5 70 8817SM400 X X 40 56 3 250 61 75 127 5 60 8817SM500 X X X 40 56 3 250 61 75 127 5 60 8S17SM500 X X X 50 66 4 500 74 91 135 10 50 8S17SM600 X X X 60 81 5 500 90 110 165 10 40 8S17SM750 X X X 95 127 8 500 135 165 250 10 200 8S17SM121 X X X 120 160 10 500 170 207 295 10 200	8S17SM250	Х						25	31	1.5	250	35	43	79	5	900
8S17SM350 X X 35 45 2.3 250 50 62 107 5 70 8S17SM400 X 40 56 3 250 61 75 127 5 60 8S17SM500 X 50 66 4 500 74 91 135 10 50 8S17SM600 X 60 81 5 500 90 110 165 10 40 8S17SM500 X 60 81 5 500 90 110 165 10 40 8S17SM750 X 60 81 5 500 108 132 200 10 300 8S17SM950 X 6 95 127 8 500 135 165 250 10 200 8S17SM121 X 6 120 160 10 500 177 207 295 10 200 8S17SM131 X 6 130 175 11 500 184 228<	8S17SM300	Х						30	38	1.8	250	42	52	92	5	800
8S17SM400 X 40 56 3 250 61 75 127 5 60 8S17SM500 X 50 66 4 500 74 91 135 10 50 8S17SM600 X 60 81 5 500 90 110 165 10 40 8S17SM750 X 60 81 5 500 90 110 165 10 40 8S17SM750 X 75 102 6 500 108 132 200 10 30 8S17SM950 X 95 127 8 500 135 165 250 10 256 8S17SM121 X 120 160 10 500 170 207 295 10 200 8S17SM131 X 130 175 11 500 184 228 340 10 180	8S17SM350	Х						35	45	2.3	250	50	62	107	5	700
8817SM500 X 50 66 4 500 74 91 135 10 500 8817SM600 X 60 81 5 500 90 110 165 10 400 8817SM750 X 75 102 6 500 108 132 200 10 300 8817SM950 X 95 127 8 500 135 165 250 10 256 8817SM121 X 10 120 160 10 500 170 207 295 10 200 8817SM131 X 10 130 175 11 500 184 228 340 10 186	8S17SM400	Х						40	56	3	250	61	75	127	5	600
8S17SM600 X 60 81 5 500 90 110 165 10 400 8S17SM750 X 75 102 6 500 108 132 200 10 300 8S17SM950 X 95 127 8 500 135 165 250 10 256 8S17SM121 X 1 120 160 10 500 170 207 295 10 200 8S17SM131 X 1 130 175 11 500 184 228 340 10 186	8S17SM500	Х						50	66	4	500	74	91	135	10	500
8S17SM750 X 75 102 6 500 108 132 200 10 300 8S17SM950 X 95 127 8 500 135 165 250 10 256 8S17SM121 X 120 160 10 500 170 207 295 10 200 8S17SM131 X 120 160 10 500 184 228 340 10 186 804750 440 140	8S17SM600	Х						60	81	5	500	90	110	165	10	400
8S17SM950 X 95 127 8 500 135 165 250 10 250 8S17SM121 X Image: X 120 160 10 500 170 207 295 10 200 8S17SM131 X Image: X 130 175 11 500 184 228 340 10 180 004720M444 X Image: X 440 450 450 450 100 180	8S17SM750	Х						75	102	6	500	108	132	200	10	300
8S17SM121 X 120 160 10 500 170 207 295 10 200 8S17SM131 X 130 175 11 500 184 228 340 10 180 8S0475M1444 X 140 140 140 160 100 184 228 340 10 180	8S17SM950	Х						95	127	8	500	135	165	250	10	250
8S17SM131 X 130 175 11 500 184 228 340 10 180	8S17SM121	Х						120	160	10	500	170	207	295	10	200
	8S17SM131	Х						130	175	11	500	184	228	340	10	180
	8S17SM141	Х						140	180	12	500	198	242	360	10	160
8S17SM151 X 150 200 13 500 212 268 395 10 150	8S17SM151	Х						150	200	13	500	212	268	395	10	150
8S17SM231 X 230 300 20 500 324 396 595 10 100	8S17SM231	Х						230	300	20	500	324	396	595	10	100
8S17SM251 X 250 330 21 500 354 429 650 10 90	8S17SM251	Х						250	330	21	500	354	429	650	10	90
8S17SM271 X A A66 710 10 80	8S17SM271	Х						270	360	23	500	382	466	710	10	80

10 to 275 \/AC \/onistons

NOTES:

A = UL1449 File E86730 - Transient Voltage Surge Suppression B = UL1414 File E38785 - Across - The Line Applications

C = CSA C22.2 File LR33458





----- Device Land Pad

SMT SERIES

MECHANICAL DIMENSIONS

Size	L	W		Т		
Code	+0.012"	+ 0.012"	H MAX.	± 0.020"		
0000	+ 0.30mm	+0.30mm	11100.	+ 0.51mm		
	0.320	0.200	0.036	0.030		
8S17SM100	[8.13]	[5.08]	[0.91]	[0.76]		
0047014140	0.320	0.200	0.044	0.030		
851/51/140	[8.13]	[5.08]	[1.12]	[0.76]		
89179M170	0.320	0.200	0.054	0.030		
0317310170	[8.13]	[5.08]	[1.37]	[0.76]		
8S17SM200	0.320	0.200	0.033	0.030		
0317311200	[8.13]	[5.08]	[0.84]	[0.76]		
8S17SM250	0.320	0.200	0.039	0.030		
0017011200	[8.13]	[5.08]	[0.99]	[0.76]		
8S17SM300	0.320	0.200	0.047	0.030		
0017011000	[8.13]	[5.08]	[1.19]	[0.76]		
8S17SM350	0.320	0.200	0.056	0.030		
0017011000	[8.13]	[5.08]	[1.42]	[0.76]		
8S17SM400	0.320	0.200	0.032	0.030		
0011011100	[8.13]	[5.08]	[0.81]	[0.76]		
8S17SM500	0.320	0.200	0.039	0.030		
	[8.13]	[5.08]	[0.99]	[0.76]		
8S17SM600	0.320	0.200	0.048	0.030		
	[8.13]	[5.08]	[1.22]	[0.76]		
8S17SM750	0.320	0.200	0.030	0.030		
	[8.13]	[5.08]	[0.76]	[0.76]		
8S17SM950	0.320	0.200	0.038	0.030		
	[8.13]	[5.08]	[0.97]	[0.76]		
8S17SM121	0.320	0.200	0.030	0.030		
	[8.13]	[5.08]	[0.76]	[0.76]		
8S17SM131	0.320	0.200	0.034	0.030		
	[8.13]	[5.08]	[0.86]	[0.76]		
8S17SM141	0.320	0.200	0.036	0.030		
	[8,13]	[5.08]	[0.91]	[0.76]		
8S17SM151	0.320	0.200	0.039	0.030		
			[0.99]			
8S17SM231	0.320	0.200	0.059	0.030		
	0.220		0.064			
8S17SM251	0.320	0.200	0.004	0.030		
		[0.00]				
8S17SM271	0.320	0.200	0.070	0.030		
	0.13	[0.00]	[1.70]	[0.70]		

Stadard Dimensions: Inches (mm) Standard Dimensions : Inches [mm]

