

## INTRODUCTION

The SMT Series, designed for surface mount applications, are small varistors manufactured in a leadless monoblock form. The SMT Series varistors have significantly lower profiles than our radialleaded devices, thus reducing PC board design requirements. They are available with maximum continuous operating voltages (MCOV) ranging from 10VAC to 600VAC.

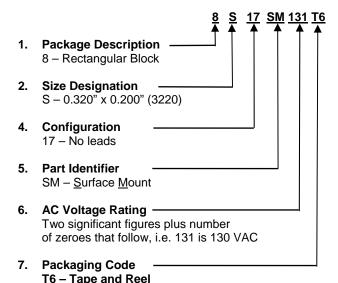
SMT Series are typically packaged in Tape and Reel packaging. To order in an alternate packaging scheme, please see the order code below or contact us.

## STYLE DESIGNATION

B - Bulk

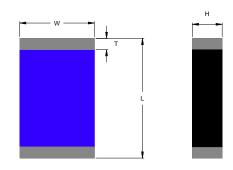
The Maida Style Number is the typical means to identify our components when ordered. The style number identifies several parameters that are important for the characteristics of the device. An alternative ordering method, if known, is by our Item Number.

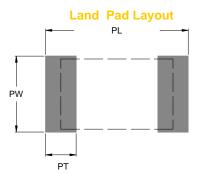
The following example is the standard part numbering system when ordering our SMT Series components by the Maida Style Number:



## STANDARD MARKING

The SMT Series currently do not have markings. Special marking may be available upon request.







## 11VAC thru 300VAC VARISTORS

|                |                              | Nominal<br>Size | Minimum<br>Marking | Maximum Ratings    |       |           |        |                                |     | Electrical Characteristics      |      |                                  |        |                 |
|----------------|------------------------------|-----------------|--------------------|--------------------|-------|-----------|--------|--------------------------------|-----|---------------------------------|------|----------------------------------|--------|-----------------|
|                |                              |                 |                    | Continuous         |       | Transient |        |                                |     | Max                             |      |                                  |        |                 |
| Maida<br>Style | Recognitions<br>To<br>Safety |                 |                    | Applied<br>Voltage |       | Energy    |        | Peak<br>Current<br>8 x 20 μsec |     | Varistor<br>Voltage<br>@1 mA DC |      | Clamping Voltage (@Test Current) |        | Typical<br>Cap. |
| Number         | Agency                       |                 |                    |                    |       | 10 x 1000 | 8 x 20 | # Pu                           |     |                                 |      | (2. 25.                          |        | 1 V rms         |
|                | Standards                    | ( )             |                    | (1.0)              | (5.0) | μsec      | μsec   | 1                              | 2   | Vmin                            | Vmax | _                                | 0μsec) | @1kHz           |
| 004701400      | ABCDEF                       | (mm)            | NI/A               | (AC)               | (DC)  | (J)       | (J)    | (A)                            | (A) | (V)                             | (V)  | (V)                              | (A)    | (pF)            |
| 8S17SM100      | X                            | N/A             | N/A                | 10                 | 14    | 0.8       | 0.8    | 250                            | 125 | 14.4                            | 21.6 | 42                               | 5      | 2000            |
| 8S17SM140      | x                            | N/A             | N/A                | 14                 | 18    | 0.8       | 0.8    | 250                            | 125 | 18.7                            | 26.0 | 47                               | 5      | 1600            |
| 8S17SM170      | x                            | N/A             | N/A                | 17                 | 22    | 1         | 1      | 250                            | 125 | 23.0                            | 31.1 | 57                               | 5      | 1300            |
| 8S17SM200      | X                            | N/A             | N/A                | 20                 | 26    | 1.2       | 1.2    | 250                            | 125 | 29.5                            | 36.5 | 68                               | 5      | 1100            |
| 8S17SM250      | X                            | N/A             | N/A                | 25                 | 31    | 1.5       | 1.5    | 250                            | 125 | 35                              | 43   | 79                               | 5      | 900             |
| 8S17SM300      | X                            | N/A             | N/A                | 30                 | 38    | 1.8       | 1.8    | 250                            | 125 | 42                              | 52   | 92                               | 5      | 800             |
| 8S17SM350      | X                            | N/A             | N/A                | 35                 | 45    | 2.3       | 2.3    | 250                            | 125 | 50                              | 62   | 107                              | 5      | 700             |
| 8S17SM400      | X                            | N/A             | N/A                | 40                 | 56    | 3         | 3      | 250                            | 125 | 61                              | 75   | 127                              | 5      | 600             |
| 8S17SM500      | X                            | N/A             | N/A                | 50                 | 66    | 4         | 4      | 500                            | 350 | 74                              | 91   | 135                              | 10     | 500             |
| 8S17SM600      | X                            | N/A             | N/A                | 60                 | 81    | 5         | 5      | 500                            | 350 | 90                              | 110  | 165                              | 10     | 400             |
| 8S17SM750      | X                            | N/A             | N/A                | 75                 | 102   | 6         | 6      | 500                            | 350 | 108                             | 132  | 200                              | 10     | 300             |
| 8S17SM950      | X                            | N/A             | N/A                | 95                 | 127   | 8         | 8      | 500                            | 350 | 135                             | 165  | 250                              | 10     | 250             |
| 8S17SM121      | X                            | N/A             | N/A                | 120                | 160   | 10        | 10     | 500                            | 350 | 170                             | 207  | 295                              | 10     | 200             |
| 8S17SM131      | X                            | N/A             | N/A                | 130                | 175   | 11        | 11     | 500                            | 350 | 184                             | 228  | 340                              | 10     | 180             |
| 8S17SM141      | X                            | N/A             | N/A                | 140                | 180   | 12        | 12     | 500                            | 350 | 198                             | 242  | 360                              | 10     | 160             |
| 8S17SM151      | X                            | N/A             | N/A                | 150                | 200   | 13        | 13     | 500                            | 350 | 212                             | 268  | 395                              | 10     | 150             |
| 8S17SM181      | X                            | N/A             | N/A                | 180                | 230   | 14        | 14     | 500                            | 350 | 255                             | 311  | 445                              | 10     | 120             |
| 8S17SM231      | X                            | N/A             | N/A                | 230                | 300   | 20        | 20     | 500                            | 350 | 324                             | 396  | 595                              | 10     | 100             |
| 8S17SM251      | X                            | N/A             | N/A                | 250                | 330   | 21        | 21     | 500                            | 350 | 354                             | 429  | 650                              | 10     | 90              |
| 8S17SM271      | X                            | N/A             | N/A                | 270                | 360   | 23        | 23     | 500                            | 350 | 382                             | 466  | 710                              | 10     | 80              |
| 8S17SM301      | x                            | N/A             | N/A                | 300                | 390   | 25        | 25     | 500                            | 350 | 425                             | 518  | 790                              | 10     | 70              |

## NOTES:

Appendix A lists the single-pulse peak current and energy ratings on file with the Safety Agencies.

Maximum transient rating specified in this table are valid. They may differ from those shown in Appendix A.

A = UL1449

D = VDE

B = cUL

E =

A = UL1449 B = cUL C = CSA

F =

# 11VAC thru 300VAC VARISTORS

| Maida<br>Style<br>Number | Length<br>(L) | Length<br>Tolerance<br>(L) | Width<br>(W) | Width<br>Tolerance<br>(W) | MAX.<br>Height<br>(H) | Land Pad<br>Length<br>(PL) | Land Pad<br>Width<br>(PW) | Land Pad<br>Thickness<br>(PT) | Typical<br>Wire<br>Diameter<br>(d) |
|--------------------------|---------------|----------------------------|--------------|---------------------------|-----------------------|----------------------------|---------------------------|-------------------------------|------------------------------------|
|                          | (in)          | (in)                       | (in)         | (in)                      | (in)                  | (in)                       | (in)                      | (in)                          | (in)                               |
| 8S17SM100                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.036                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM140                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.044                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
|                          |               | 1                          |              |                           |                       |                            |                           |                               |                                    |
| 8S17SM170                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.054                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM200                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.033                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM250                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.039                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM300                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.047                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM350                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.056                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM400                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.034                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM500                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.039                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM600                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.026                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM750                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.032                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM950                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.039                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM121                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.030                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM131                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.034                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM141                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.036                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM151                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.039                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM181                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.042                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM231                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.059                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM251                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.064                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM271                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.070                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |
| 8S17SM301                | 0.320         | 0.012                      | 0.200        | 0.012                     | 0.077                 | 0.402                      | 0.217                     | 0.087                         | N/A                                |