

THERMALLY PROTECTED SERIES

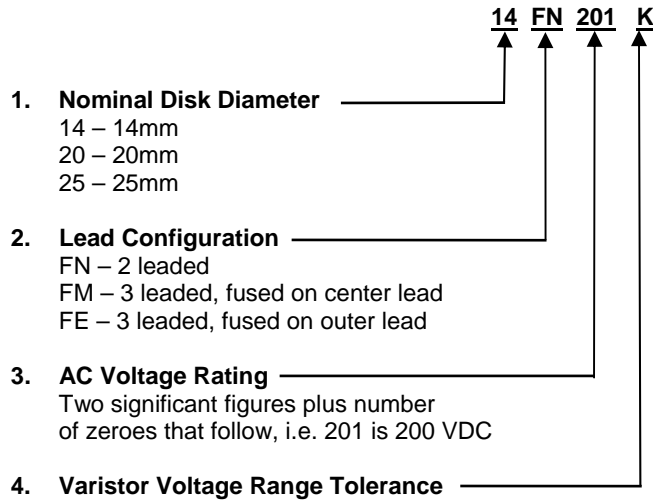
INTRODUCTION

The Thermally Protected Series is designed for safe disconnection of the varistor from the circuit due to abnormal operating conditions. These components consist of 2 or 3 lead wire leads, a thermal disconnect, and have nominal diameters of 14mm, 20mm, and 25mm. Voltage ranges from 60VAC-750VAC with peak surge currents of 4.5kA/6kA (14mm), 10kA (20mm), and 18kA (25mm).

STYLE DESIGNATION

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 Thermally Protected Series components by the Maida Style Number:



STANDARD MARKING

Minimum marking shall consist of an abbreviated style designation and, when space is available, the manufacturer's initials or company logo.

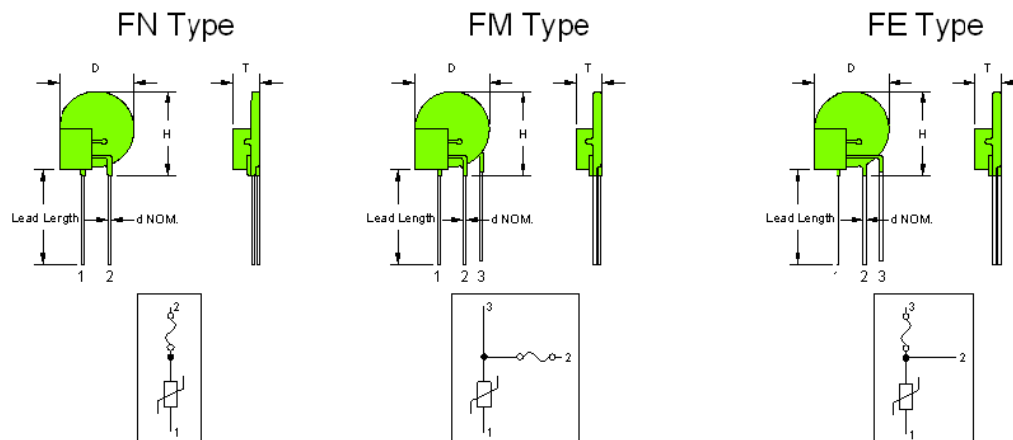
Example:
 MDC
 FV
 14N201

Where:

MDC - Company Initials
 FV - Fail safe Varistor
 14 - Diameter
 N - Series Designation (FN, FM, FE)
 201 - Nominal DC Voltage Rating (200VDC)

A manufacturing date code and/or special markings are available upon request.

Other safety agency designations are included where applicable.



THERMALLY PROTECTED SERIES

SPECIFICATIONS

50VAC thru 140VAC VARISTORS

| Maida Style Number | Recognitions To Safety Agency Standards | | | | | Nominal Size (mm) | Minimum Marking | Maximum Ratings | | | | | | Electrical Characteristics | | | | |
|--------------------|---|--|--|--|--|-------------------|-----------------|-----------------|------|-------------------------|----------------------|--|-------|-------------------------------|----------|--|-----|-----------------------------------|
| | | | | | | | | Applied Voltage | | Energy | | Peak Current 8 x 20 μ sec # Pulses | | Varistor Voltage @ 1 mA DC | | Max Clamping Voltage (@ Test Current) | | Typical Cap. 1 V rms @ 1kHz |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | (AC) | (DC) | 10 x 1000 μ sec (J) | 8 x 20 μ sec (J) | 1 (A) | 2 (A) | Vmin (V) | Vmax (V) | (8 x 20 μ sec) (V) | (A) | (pF) |
| 14FE820K | X | | | | | 14 | MDC-FV-14E820K | 50 | 65 | 27 | 27 | 4500 | 2500 | 74 | 90 | 135 | 50 | 2400 |
| 14FM820K | X | | | | | 14 | MDC-FV-14M820K | 50 | 65 | 27 | 27 | 4500 | 2500 | 74 | 90 | 135 | 50 | 2400 |
| 14FN820K | X | | | | | 14 | MDC-FV-14N820K | 50 | 65 | 27 | 27 | 4500 | 2500 | 74 | 90 | 135 | 50 | 2400 |
| 20FE820K | X | | | | | 20 | MDC-FV-20E820K | 50 | 65 | 56 | 56 | 10000 | 6500 | 74 | 90 | 135 | 100 | 4900 |
| 20FM820K | X | | | | | 20 | MDC-FV-20M820K | 50 | 65 | 56 | 56 | 10000 | 6500 | 74 | 90 | 135 | 100 | 4900 |
| 20FN820K | X | | | | | 20 | MDC-FV-20N820K | 50 | 65 | 56 | 56 | 10000 | 6500 | 74 | 90 | 135 | 100 | 4900 |
| 14FE101K | X | | | | | 14 | MDC-FV-14E101K | 60 | 85 | 33 | 33 | 4500 | 2500 | 90 | 110 | 165 | 50 | 2000 |
| 14FM101K | X | | | | | 14 | MDC-FV-14M101K | 60 | 85 | 33 | 33 | 4500 | 2500 | 90 | 110 | 165 | 50 | 2000 |
| 14FN101K | X | | | | | 14 | MDC-FV-14N101K | 60 | 85 | 33 | 33 | 4500 | 2500 | 90 | 110 | 165 | 50 | 2000 |
| 20FE101K | X | | | | | 20 | MDC-FV-20E101K | 60 | 85 | 70 | 70 | 10000 | 6500 | 90 | 110 | 165 | 100 | 4000 |
| 20FM101K | X | | | | | 20 | MDC-FV-20M101K | 60 | 85 | 70 | 70 | 10000 | 6500 | 90 | 110 | 165 | 100 | 4000 |
| 20FN101K | X | | | | | 20 | MDC-FV-20N101K | 60 | 85 | 70 | 70 | 10000 | 6500 | 90 | 110 | 165 | 100 | 4000 |
| 14FE121K | X | | | | | 14 | MDC-FV-14E121K | 75 | 100 | 40 | 40 | 4500 | 2500 | 108 | 132 | 200 | 50 | 1700 |
| 14FM121K | X | | | | | 14 | MDC-FV-14M121K | 75 | 100 | 40 | 40 | 4500 | 2500 | 108 | 132 | 200 | 50 | 1700 |
| 14FN121K | X | | | | | 14 | MDC-FV-14N121K | 75 | 100 | 40 | 40 | 4500 | 2500 | 108 | 132 | 200 | 50 | 1700 |
| 20FE121K | X | | | | | 20 | MDC-FV-20E121K | 75 | 100 | 85 | 85 | 10000 | 6500 | 108 | 132 | 200 | 100 | 3300 |
| 20FM121K | X | | | | | 20 | MDC-FV-20M121K | 75 | 100 | 85 | 85 | 10000 | 6500 | 108 | 132 | 200 | 100 | 3300 |
| 20FN121K | X | | | | | 20 | MDC-FV-20N121K | 75 | 100 | 85 | 85 | 10000 | 6500 | 108 | 132 | 200 | 100 | 3300 |
| 14FE151K | X | | | | | 14 | MDC-FV-14E151K | 95 | 125 | 50 | 50 | 6000 | 4500 | 135 | 165 | 250 | 50 | 1300 |
| 14FM151K | X | | | | | 14 | MDC-FV-14M151K | 95 | 125 | 50 | 50 | 6000 | 4500 | 135 | 165 | 250 | 50 | 1300 |
| 14FN151K | X | | | | | 14 | MDC-FV-14N151K | 95 | 125 | 50 | 50 | 6000 | 4500 | 135 | 165 | 250 | 50 | 1300 |
| 20FE151K | X | | | | | 20 | MDC-FV-20E151K | 95 | 125 | 100 | 100 | 10000 | 6000 | 135 | 165 | 250 | 100 | 2700 |
| 20FM151K | X | | | | | 20 | MDC-FV-20M151K | 95 | 125 | 100 | 100 | 10000 | 6000 | 135 | 165 | 250 | 100 | 2700 |
| 20FN151K | X | | | | | 20 | MDC-FV-20N151K | 95 | 125 | 100 | 100 | 10000 | 6000 | 135 | 165 | 250 | 100 | 2700 |
| 25FE151K | X | | | | | 25 | MDC-FV-25E151K | 95 | 125 | 160 | 160 | 15000 | 12000 | 135 | 165 | 250 | 150 | 4300 |
| 25FM151K | X | | | | | 25 | MDC-FV-25M151K | 95 | 125 | 160 | 160 | 15000 | 12000 | 135 | 165 | 250 | 150 | 4300 |
| 25FN151K | X | | | | | 25 | MDC-FV-25N151K | 95 | 125 | 160 | 160 | 15000 | 12000 | 135 | 165 | 250 | 150 | 4300 |
| 14FE181K | X | | | | | 14 | MDC-FV-14E181K | 115 | 150 | 58 | 58 | 6000 | 4500 | 162 | 198 | 300 | 50 | 1100 |
| 14FM181K | X | | | | | 14 | MDC-FV-14M181K | 115 | 150 | 58 | 58 | 6000 | 4500 | 162 | 198 | 300 | 50 | 1100 |
| 14FN181K | X | | | | | 14 | MDC-FV-14N181K | 115 | 150 | 58 | 58 | 6000 | 4500 | 162 | 198 | 300 | 50 | 1100 |
| 20FE181K | X | | | | | 20 | MDC-FV-20E181K | 115 | 150 | 110 | 110 | 10000 | 6000 | 162 | 198 | 300 | 100 | 2200 |
| 20FM181K | X | | | | | 20 | MDC-FV-20M181K | 115 | 150 | 110 | 110 | 10000 | 6000 | 162 | 198 | 300 | 100 | 2200 |
| 20FN181K | X | | | | | 20 | MDC-FV-20N181K | 115 | 150 | 110 | 110 | 10000 | 6000 | 162 | 198 | 300 | 100 | 2200 |
| 25FE181K | X | | | | | 25 | MDC-FV-25E181K | 115 | 150 | 175 | 175 | 15000 | 12000 | 162 | 198 | 300 | 150 | 3500 |
| 25FM181K | X | | | | | 25 | MDC-FV-25M181K | 115 | 150 | 175 | 175 | 15000 | 12000 | 162 | 198 | 300 | 150 | 3500 |
| 25FN181K | X | | | | | 25 | MDC-FV-25N181K | 115 | 150 | 175 | 175 | 15000 | 12000 | 162 | 198 | 300 | 150 | 3500 |
| 14FE201K | X | | | | | 14 | MDC-FV-14E201K | 130 | 170 | 70 | 70 | 6000 | 4500 | 185 | 225 | 340 | 50 | 1000 |
| 14FM201K | X | | | | | 14 | MDC-FV-14M201K | 130 | 170 | 70 | 70 | 6000 | 4500 | 185 | 225 | 340 | 50 | 1000 |
| 14FN201K | X | | | | | 14 | MDC-FV-14N201K | 130 | 170 | 70 | 70 | 6000 | 4500 | 185 | 225 | 340 | 50 | 1000 |
| 20FE201K | X | | | | | 20 | MDC-FV-20E201K | 130 | 170 | 140 | 140 | 10000 | 6000 | 185 | 225 | 340 | 100 | 2000 |
| 20FM201K | X | | | | | 20 | MDC-FV-20M201K | 130 | 170 | 140 | 140 | 10000 | 6000 | 185 | 225 | 340 | 100 | 2000 |
| 20FN201K | X | | | | | 20 | MDC-FV-20N201K | 130 | 170 | 140 | 140 | 10000 | 6000 | 185 | 225 | 340 | 100 | 2000 |
| 25FE201K | X | | | | | 25 | MDC-FV-25E201K | 130 | 170 | 210 | 210 | 15000 | 12000 | 185 | 225 | 340 | 150 | 3200 |
| 25FM201K | X | | | | | 25 | MDC-FV-25M201K | 130 | 170 | 210 | 210 | 15000 | 12000 | 185 | 225 | 340 | 150 | 3200 |
| 25FN201K | X | | | | | 25 | MDC-FV-25N201K | 130 | 170 | 210 | 210 | 15000 | 12000 | 185 | 225 | 340 | 150 | 3200 |
| 14FE221K | X | | | | | 14 | MDC-FV-14E221K | 140 | 180 | 78 | 78 | 6000 | 4500 | 198 | 242 | 360 | 50 | 900 |
| 14FM221K | X | | | | | 14 | MDC-FV-14M221K | 140 | 180 | 78 | 78 | 6000 | 4500 | 198 | 242 | 360 | 50 | 900 |
| 14FN221K | X | | | | | 14 | MDC-FV-14N221K | 140 | 180 | 78 | 78 | 6000 | 4500 | 198 | 242 | 360 | 50 | 900 |
| 20FE221K | X | | | | | 20 | MDC-FV-20E221K | 140 | 180 | 155 | 155 | 10000 | 6000 | 198 | 242 | 360 | 100 | 1800 |
| 20FM221K | X | | | | | 20 | MDC-FV-20M221K | 140 | 180 | 155 | 155 | 10000 | 6000 | 198 | 242 | 360 | 100 | 1800 |
| 20FN221K | X | | | | | 20 | MDC-FV-20N221K | 140 | 180 | 155 | 155 | 10000 | 6000 | 198 | 242 | 360 | 100 | 1800 |
| 25FE221K | X | | | | | 25 | MDC-FV-25E221K | 140 | 180 | 230 | 230 | 15000 | 12000 | 198 | 242 | 360 | 150 | 2900 |
| 25FM221K | X | | | | | 25 | MDC-FV-25M221K | 140 | 180 | 230 | 230 | 15000 | 12000 | 198 | 242 | 360 | 150 | 2900 |
| 25FN221K | X | | | | | 25 | MDC-FV-25N221K | 140 | 180 | 230 | 230 | 15000 | 12000 | 198 | 242 | 360 | 150 | 2900 |

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 File E321173 - Surge Protective Devices

D = VDE File 40017480

B = cUL File E321173 - Surge Protective Devices

E = SEV - 96.7 70250.01

C = CSA C22.2 File 033468

50VAC thru 140VAC VARISTORS

| Maida Style Number | MAX. Diameter (D) (in) | MAX. Thickness (T) (in) | MAX. Height (H) (in) | Typical X Dimension (in) | Typical X Tolerance (in) | Typical Y Dimension (in) | Typical Y Tolerance (in) | Typical Z Dimension (in) | Typical Z Tolerance (in) | Typical Wire Diameter (d) (in) |
|--------------------|---------------------------|----------------------------|-------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------------|
| 14FE820K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM820K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN820K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE820K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM820K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN820K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 14FE101K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM101K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN101K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE101K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM101K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN101K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 14FE121K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM121K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN121K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE121K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM121K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN121K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 14FE151K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM151K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN151K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE151K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM151K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN151K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE151K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM151K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN151K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 14FE181K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM181K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN181K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE181K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM181K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN181K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE181K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM181K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN181K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 14FE201K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM201K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN201K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE201K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM201K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN201K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE201K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM201K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN201K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 14FE221K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM221K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN221K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE221K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM221K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN221K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE221K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM221K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN221K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |

NOTE: Alternate dimensional specifications, including lead styles, for any part listed may be available upon request. Please contact us for any inquiries.

THERMALLY PROTECTED SERIES

SPECIFICATIONS

150VAC thru 250VAC VARISTORS

| Maida Style Number | Recognitions To Safety Agency Standards | | | | | | Nominal Size (mm) | Minimum Marking | Maximum Ratings | | | | | | Electrical Characteristics | | | | |
|--------------------|---|--|--|--|--|----|-------------------|-----------------|-----------------|------|---------------------|------------------|-------------------------------|-----|----------------------------|----------|--------------------------------------|------|----------------------------|
| | | | | | | | | | Continuous | | Transient | | | | Varistor Voltage @1 mA DC | | Max Clamping Voltage (@Test Current) | | Typical Cap. 1 V rms @1kHz |
| | | | | | | | | | Applied Voltage | | Energy | | Peak Current 8 x 20 μ sec | | | | | | |
| | | | | | | | | | | | 10 x 1000 μ sec | 8 x 20 μ sec | # Pulses | | Vmin (V) | Vmax (V) | (8 x 20 μ sec) | | |
| | | | | | | | | | (AC) | (DC) | (J) | (J) | (A) | (A) | | | (V) | (V) | (V) |
| 14FE241K | X | | | | | 14 | MDC-FV-14E241K | 150 | 200 | 85 | 85 | 6000 | 4500 | 216 | 264 | 395 | 50 | 830 | |
| 14FM241K | X | | | | | 14 | MDC-FV-14M241K | 150 | 200 | 85 | 85 | 6000 | 4500 | 216 | 264 | 395 | 50 | 830 | |
| 14FN241K | X | | | | | 14 | MDC-FV-14N241K | 150 | 200 | 85 | 85 | 6000 | 4500 | 216 | 264 | 395 | 50 | 830 | |
| 20FE241K | X | | | | | 20 | MDC-FV-20E241K | 150 | 200 | 170 | 170 | 10000 | 6000 | 216 | 264 | 395 | 100 | 1650 | |
| 20FM241K | X | | | | | 20 | MDC-FV-20M241K | 150 | 200 | 170 | 170 | 10000 | 6000 | 216 | 264 | 395 | 100 | 1650 | |
| 20FN241K | X | | | | | 20 | MDC-FV-20N241K | 150 | 200 | 170 | 170 | 10000 | 6000 | 216 | 264 | 395 | 100 | 1650 | |
| 25FE241K | X | | | | | 25 | MDC-FV-25E241K | 150 | 200 | 255 | 255 | 15000 | 12000 | 216 | 264 | 395 | 150 | 2650 | |
| 25FM241K | X | | | | | 25 | MDC-FV-25M241K | 150 | 200 | 255 | 255 | 15000 | 12000 | 216 | 264 | 395 | 150 | 2650 | |
| 25FN241K | X | | | | | 25 | MDC-FV-25N241K | 150 | 200 | 255 | 255 | 15000 | 12000 | 216 | 264 | 395 | 150 | 2650 | |
| 14FE271K | X | | | | | 14 | MDC-FV-14E271K | 175 | 225 | 100 | 100 | 6000 | 4500 | 243 | 297 | 455 | 50 | 740 | |
| 14FM271K | X | | | | | 14 | MDC-FV-14M271K | 175 | 225 | 100 | 100 | 6000 | 4500 | 243 | 297 | 455 | 50 | 740 | |
| 14FN271K | X | | | | | 14 | MDC-FV-14N271K | 175 | 225 | 100 | 100 | 6000 | 4500 | 243 | 297 | 455 | 50 | 740 | |
| 20FE271K | X | | | | | 20 | MDC-FV-20E271K | 175 | 225 | 190 | 190 | 10000 | 6000 | 243 | 297 | 455 | 100 | 1500 | |
| 20FM271K | X | | | | | 20 | MDC-FV-20M271K | 175 | 225 | 190 | 190 | 10000 | 6000 | 243 | 297 | 455 | 100 | 1500 | |
| 20FN271K | X | | | | | 20 | MDC-FV-20N271K | 175 | 225 | 190 | 190 | 10000 | 6000 | 243 | 297 | 455 | 100 | 1500 | |
| 25FE271K | X | | | | | 25 | MDC-FV-25E271K | 175 | 225 | 285 | 285 | 15000 | 12000 | 243 | 297 | 455 | 150 | 2400 | |
| 25FM271K | X | | | | | 25 | MDC-FV-25M271K | 175 | 225 | 285 | 285 | 15000 | 12000 | 243 | 297 | 455 | 150 | 2400 | |
| 25FN271K | X | | | | | 25 | MDC-FV-25N271K | 175 | 225 | 285 | 285 | 15000 | 12000 | 243 | 297 | 455 | 150 | 2400 | |
| 14FE301K | X | | | | | 14 | MDC-FV-14E301K | 190 | 250 | 107 | 107 | 6000 | 4500 | 270 | 330 | 500 | 50 | 670 | |
| 14FM301K | X | | | | | 14 | MDC-FV-14M301K | 190 | 250 | 107 | 107 | 6000 | 4500 | 270 | 330 | 500 | 50 | 670 | |
| 14FN301K | X | | | | | 14 | MDC-FV-14N301K | 190 | 250 | 107 | 107 | 6000 | 4500 | 270 | 330 | 500 | 50 | 670 | |
| 20FE301K | X | | | | | 20 | MDC-FV-20E301K | 190 | 250 | 205 | 205 | 10000 | 6000 | 270 | 330 | 500 | 100 | 1300 | |
| 20FM301K | X | | | | | 20 | MDC-FV-20M301K | 190 | 250 | 205 | 205 | 10000 | 6000 | 270 | 330 | 500 | 100 | 1300 | |
| 20FN301K | X | | | | | 20 | MDC-FV-20N301K | 190 | 250 | 205 | 205 | 10000 | 6000 | 270 | 330 | 500 | 100 | 1300 | |
| 25FE301K | X | | | | | 25 | MDC-FV-25E301K | 190 | 250 | 310 | 310 | 15000 | 12000 | 270 | 330 | 500 | 150 | 2100 | |
| 25FM301K | X | | | | | 25 | MDC-FV-25M301K | 190 | 250 | 310 | 310 | 15000 | 12000 | 270 | 330 | 500 | 150 | 2100 | |
| 25FN301K | X | | | | | 25 | MDC-FV-25N301K | 190 | 250 | 310 | 310 | 15000 | 12000 | 270 | 330 | 500 | 150 | 2100 | |
| 14FE331K | X | | | | | 14 | MDC-FV-14E331K | 210 | 275 | 115 | 115 | 6000 | 4500 | 297 | 363 | 550 | 50 | 610 | |
| 14FM331K | X | | | | | 14 | MDC-FV-14M331K | 210 | 275 | 115 | 115 | 6000 | 4500 | 297 | 363 | 550 | 50 | 610 | |
| 14FN331K | X | | | | | 14 | MDC-FV-14N331K | 210 | 275 | 115 | 115 | 6000 | 4500 | 297 | 363 | 550 | 50 | 610 | |
| 20FE331K | X | | | | | 20 | MDC-FV-20E331K | 210 | 275 | 215 | 215 | 10000 | 6000 | 297 | 363 | 550 | 100 | 1200 | |
| 20FM331K | X | | | | | 20 | MDC-FV-20M331K | 210 | 275 | 215 | 215 | 10000 | 6000 | 297 | 363 | 550 | 100 | 1200 | |
| 20FN331K | X | | | | | 20 | MDC-FV-20N331K | 210 | 275 | 215 | 215 | 10000 | 6000 | 297 | 363 | 550 | 100 | 1200 | |
| 25FE331K | X | | | | | 25 | MDC-FV-25E331K | 210 | 275 | 325 | 325 | 15000 | 12000 | 297 | 363 | 550 | 150 | 1900 | |
| 25FM331K | X | | | | | 25 | MDC-FV-25M331K | 210 | 275 | 325 | 325 | 15000 | 12000 | 297 | 363 | 550 | 150 | 1900 | |
| 25FN331K | X | | | | | 25 | MDC-FV-25N331K | 210 | 275 | 325 | 325 | 15000 | 12000 | 297 | 363 | 550 | 150 | 1900 | |
| 14FE361K | X | | | | | 14 | MDC-FV-14E361K | 230 | 300 | 125 | 125 | 6000 | 4500 | 324 | 396 | 595 | 50 | 560 | |
| 14FM361K | X | | | | | 14 | MDC-FV-14M361K | 230 | 300 | 125 | 125 | 6000 | 4500 | 324 | 396 | 595 | 50 | 560 | |
| 14FN361K | X | | | | | 14 | MDC-FV-14N361K | 230 | 300 | 125 | 125 | 6000 | 4500 | 324 | 396 | 595 | 50 | 560 | |
| 20FE361K | X | | | | | 20 | MDC-FV-20E361K | 230 | 300 | 225 | 225 | 10000 | 6000 | 324 | 396 | 595 | 100 | 1100 | |
| 20FM361K | X | | | | | 20 | MDC-FV-20M361K | 230 | 300 | 225 | 225 | 10000 | 6000 | 324 | 396 | 595 | 100 | 1100 | |
| 20FN361K | X | | | | | 20 | MDC-FV-20N361K | 230 | 300 | 225 | 225 | 10000 | 6000 | 324 | 396 | 595 | 100 | 1100 | |
| 25FE361K | X | | | | | 25 | MDC-FV-25E361K | 230 | 300 | 340 | 340 | 15000 | 12000 | 324 | 396 | 595 | 150 | 1750 | |
| 25FM361K | X | | | | | 25 | MDC-FV-25M361K | 230 | 300 | 340 | 340 | 15000 | 12000 | 324 | 396 | 595 | 150 | 1750 | |
| 25FN361K | X | | | | | 25 | MDC-FV-25N361K | 230 | 300 | 340 | 340 | 15000 | 12000 | 324 | 396 | 595 | 150 | 1750 | |
| 14FE391K | X | | | | | 14 | MDC-FV-14E391K | 250 | 320 | 140 | 140 | 6000 | 4500 | 351 | 429 | 650 | 50 | 510 | |
| 14FM391K | X | | | | | 14 | MDC-FV-14M391K | 250 | 320 | 140 | 140 | 6000 | 4500 | 351 | 429 | 650 | 50 | 510 | |
| 14FN391K | X | | | | | 14 | MDC-FV-14N391K | 250 | 320 | 140 | 140 | 6000 | 4500 | 351 | 429 | 650 | 50 | 510 | |
| 20FE391K | X | | | | | 20 | MDC-FV-20E391K | 250 | 320 | 240 | 240 | 10000 | 6000 | 351 | 429 | 650 | 100 | 1000 | |
| 20FM391K | X | | | | | 20 | MDC-FV-20M391K | 250 | 320 | 240 | 240 | 10000 | 6000 | 351 | 429 | 650 | 100 | 1000 | |
| 20FN391K | X | | | | | 20 | MDC-FV-20N391K | 250 | 320 | 240 | 240 | 10000 | 6000 | 351 | 429 | 650 | 100 | 1000 | |
| 25FE391K | X | | | | | 25 | MDC-FV-25E391K | 250 | 320 | 360 | 360 | 15000 | 12000 | 351 | 429 | 650 | 150 | 1600 | |
| 25FM391K | X | | | | | 25 | MDC-FV-25M391K | 250 | 320 | 360 | 360 | 15000 | 12000 | 351 | 429 | 650 | 150 | 1600 | |
| 25FN391K | X | | | | | 25 | MDC-FV-25N391K | 250 | 320 | 360 | 360 | 15000 | 12000 | 351 | 429 | 650 | 150 | 1600 | |

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 File E321173 - Surge Protective Devices

D = VDE File 40017480

B = cUL File E321173 - Surge Protective Devices

E = SEV - 96.7 70250.01

C = CSA C22.2 File 033468

150VAC thru 250VAC VARISTORS

| Maida Style Number | MAX. Diameter (D) (in) | MAX. Thickness (T) (in) | MAX. Height (H) (in) | Typical X Dimension (in) | Typical X Tolerance (in) | Typical Y Dimension (in) | Typical Y Tolerance (in) | Typical Z Dimension (in) | Typical Z Tolerance (in) | Typical Wire Diameter (d) (in) |
|--------------------|---------------------------|----------------------------|-------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------------|
| 14FE241K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM241K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN241K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE241K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM241K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN241K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE241K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM241K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN241K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 14FE271K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM271K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN271K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE271K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM271K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN271K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE271K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM271K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN271K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 14FE301K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM301K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN301K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE301K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM301K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN301K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE301K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM301K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN301K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 14FE331K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM331K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN331K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE331K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM331K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN331K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE331K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM331K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN331K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 14FE361K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM361K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN361K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE361K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM361K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN361K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE361K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM361K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN361K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 14FE391K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM391K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN391K | 0.748 | 0.386 | 0.827 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE391K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM391K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN391K | 0.945 | 0.386 | 1.024 | 0.295 | 0.039 | 0.150 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE391K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM391K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN391K | 1.142 | 0.465 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |

NOTE: Alternate dimensional specifications, including lead styles, for any part listed may be available upon request. Please contact us for any inquiries.

THERMALLY PROTECTED SERIES

SPECIFICATIONS

275VAC thru 420VAC VARISTORS

| Maida Style Number | Recognitions To Safety Agency Standards | | | | | | Nominal Size (mm) | Minimum Marking | Maximum Ratings | | | | | | Electrical Characteristics | | | | |
|--------------------|---|--|--|--|--|--|-------------------|-----------------|-----------------|-----|-----------|------|---------------------|------------------|----------------------------|-----|--------------------------------------|----------|----------------------------|
| | | | | | | | | | Continuous | | Transient | | | | Varistor Voltage @1 mA DC | | Max Clamping Voltage (@Test Current) | | Typical Cap. 1 V rms @1kHz |
| | | | | | | | | | Applied Voltage | | Energy | | Peak Current | | | | | | |
| | | | | | | | | | | | (AC) | (DC) | 10 x 1000 μ sec | 8 x 20 μ sec | # Pulses | | Vmin (V) | Vmax (V) | (8 x 20 μ sec) |
| | | | | | | | | | (A) | (A) | | | 1 | 2 | (V) | (A) | | | |
| 14FE431K | X | | | | | | 14 | MDC-FV-14E431K | 275 | 350 | 155 | 155 | 6000 | 4500 | 387 | 473 | 710 | 50 | 460 |
| 14FM431K | X | | | | | | 14 | MDC-FV-14M431K | 275 | 350 | 155 | 155 | 6000 | 4500 | 387 | 473 | 710 | 50 | 460 |
| 14FN431K | X | | | | | | 14 | MDC-FV-14N431K | 275 | 350 | 155 | 155 | 6000 | 4500 | 387 | 473 | 710 | 50 | 460 |
| 20FE431K | X | | | | | | 20 | MDC-FV-20E431K | 275 | 350 | 270 | 270 | 10000 | 6000 | 387 | 473 | 710 | 100 | 930 |
| 20FM431K | X | | | | | | 20 | MDC-FV-20M431K | 275 | 350 | 270 | 270 | 10000 | 6000 | 387 | 473 | 710 | 100 | 930 |
| 20FN431K | X | | | | | | 20 | MDC-FV-20N431K | 275 | 350 | 270 | 270 | 10000 | 6000 | 387 | 473 | 710 | 100 | 930 |
| 25FE431K | X | | | | | | 25 | MDC-FV-25E431K | 275 | 350 | 440 | 440 | 15000 | 12000 | 387 | 473 | 710 | 150 | 1500 |
| 25FM431K | X | | | | | | 25 | MDC-FV-25M431K | 275 | 350 | 440 | 440 | 15000 | 12000 | 387 | 473 | 710 | 150 | 1500 |
| 25FN431K | X | | | | | | 25 | MDC-FV-25N431K | 275 | 350 | 440 | 440 | 15000 | 12000 | 387 | 473 | 710 | 150 | 1500 |
| 14FE471K | X | | | | | | 14 | MDC-FV-14E471K | 300 | 385 | 175 | 175 | 6000 | 4500 | 423 | 517 | 775 | 50 | 430 |
| 14FM471K | X | | | | | | 14 | MDC-FV-14M471K | 300 | 385 | 175 | 175 | 6000 | 4500 | 423 | 517 | 775 | 50 | 430 |
| 14FN471K | X | | | | | | 14 | MDC-FV-14N471K | 300 | 385 | 175 | 175 | 6000 | 4500 | 423 | 517 | 775 | 50 | 430 |
| 20FE471K | X | | | | | | 20 | MDC-FV-20E471K | 300 | 385 | 350 | 350 | 10000 | 6000 | 423 | 517 | 775 | 100 | 850 |
| 20FM471K | X | | | | | | 20 | MDC-FV-20M471K | 300 | 385 | 350 | 350 | 10000 | 6000 | 423 | 517 | 775 | 100 | 850 |
| 20FN471K | X | | | | | | 20 | MDC-FV-20N471K | 300 | 385 | 350 | 350 | 10000 | 6000 | 423 | 517 | 775 | 100 | 850 |
| 25FE471K | X | | | | | | 25 | MDC-FV-25E471K | 300 | 385 | 490 | 490 | 15000 | 12000 | 423 | 517 | 775 | 150 | 1400 |
| 25FM471K | X | | | | | | 25 | MDC-FV-25M471K | 300 | 385 | 490 | 490 | 15000 | 12000 | 423 | 517 | 775 | 150 | 1400 |
| 25FN471K | X | | | | | | 25 | MDC-FV-25N471K | 300 | 385 | 490 | 490 | 15000 | 12000 | 423 | 517 | 775 | 150 | 1400 |
| 14FE511K | X | | | | | | 14 | MDC-FV-14E511K | 320 | 415 | 190 | 190 | 6000 | 4500 | 459 | 561 | 845 | 50 | 390 |
| 14FM511K | X | | | | | | 14 | MDC-FV-14M511K | 320 | 415 | 190 | 190 | 6000 | 4500 | 459 | 561 | 845 | 50 | 390 |
| 14FN511K | X | | | | | | 14 | MDC-FV-14N511K | 320 | 415 | 190 | 190 | 6000 | 4500 | 459 | 561 | 845 | 50 | 390 |
| 20FE511K | X | | | | | | 20 | MDC-FV-20E511K | 320 | 415 | 380 | 380 | 10000 | 6000 | 459 | 561 | 845 | 100 | 780 |
| 20FM511K | X | | | | | | 20 | MDC-FV-20M511K | 320 | 415 | 380 | 380 | 10000 | 6000 | 459 | 561 | 845 | 100 | 780 |
| 20FN511K | X | | | | | | 20 | MDC-FV-20N511K | 320 | 415 | 380 | 380 | 10000 | 6000 | 459 | 561 | 845 | 100 | 780 |
| 25FE511K | X | | | | | | 25 | MDC-FV-25E511K | 320 | 415 | 530 | 530 | 15000 | 12000 | 459 | 561 | 845 | 150 | 1250 |
| 25FM511K | X | | | | | | 25 | MDC-FV-25M511K | 320 | 415 | 530 | 530 | 15000 | 12000 | 459 | 561 | 845 | 150 | 1250 |
| 25FN511K | X | | | | | | 25 | MDC-FV-25N511K | 320 | 415 | 530 | 530 | 15000 | 12000 | 459 | 561 | 845 | 150 | 1250 |
| 14FE561K | X | | | | | | 14 | MDC-FV-14E561K | 350 | 460 | 200 | 200 | 6000 | 4500 | 504 | 616 | 925 | 50 | 360 |
| 14FM561K | X | | | | | | 14 | MDC-FV-14M561K | 350 | 460 | 200 | 200 | 6000 | 4500 | 504 | 616 | 925 | 50 | 360 |
| 14FN561K | X | | | | | | 14 | MDC-FV-14N561K | 350 | 460 | 200 | 200 | 6000 | 4500 | 504 | 616 | 925 | 50 | 360 |
| 20FE561K | X | | | | | | 20 | MDC-FV-20E561K | 350 | 460 | 400 | 400 | 10000 | 6000 | 504 | 616 | 925 | 100 | 710 |
| 20FM561K | X | | | | | | 20 | MDC-FV-20M561K | 350 | 460 | 400 | 400 | 10000 | 6000 | 504 | 616 | 925 | 100 | 710 |
| 20FN561K | X | | | | | | 20 | MDC-FV-20N561K | 350 | 460 | 400 | 400 | 10000 | 6000 | 504 | 616 | 925 | 100 | 710 |
| 25FE561K | X | | | | | | 25 | MDC-FV-25E561K | 350 | 460 | 560 | 560 | 15000 | 12000 | 504 | 616 | 925 | 150 | 1150 |
| 25FM561K | X | | | | | | 25 | MDC-FV-25M561K | 350 | 460 | 560 | 560 | 15000 | 12000 | 504 | 616 | 925 | 150 | 1150 |
| 25FN561K | X | | | | | | 25 | MDC-FV-25N561K | 350 | 460 | 560 | 560 | 15000 | 12000 | 504 | 616 | 925 | 150 | 1150 |
| 14FE621K | X | | | | | | 14 | MDC-FV-14E621K | 385 | 505 | 210 | 210 | 6000 | 4500 | 558 | 682 | 1025 | 50 | 320 |
| 14FM621K | X | | | | | | 14 | MDC-FV-14M621K | 385 | 505 | 210 | 210 | 6000 | 4500 | 558 | 682 | 1025 | 50 | 320 |
| 14FN621K | X | | | | | | 14 | MDC-FV-14N621K | 385 | 505 | 210 | 210 | 6000 | 4500 | 558 | 682 | 1025 | 50 | 320 |
| 20FE621K | X | | | | | | 20 | MDC-FV-20E621K | 385 | 505 | 425 | 425 | 10000 | 6000 | 558 | 682 | 1025 | 100 | 650 |
| 20FM621K | X | | | | | | 20 | MDC-FV-20M621K | 385 | 505 | 425 | 425 | 10000 | 6000 | 558 | 682 | 1025 | 100 | 650 |
| 20FN621K | X | | | | | | 20 | MDC-FV-20N621K | 385 | 505 | 425 | 425 | 10000 | 6000 | 558 | 682 | 1025 | 100 | 650 |
| 25FE621K | X | | | | | | 25 | MDC-FV-25E621K | 385 | 505 | 590 | 590 | 15000 | 12000 | 558 | 682 | 1025 | 150 | 1050 |
| 25FM621K | X | | | | | | 25 | MDC-FV-25M621K | 385 | 505 | 590 | 590 | 15000 | 12000 | 558 | 682 | 1025 | 150 | 1050 |
| 25FN621K | X | | | | | | 25 | MDC-FV-25N621K | 385 | 505 | 590 | 590 | 15000 | 12000 | 558 | 682 | 1025 | 150 | 1050 |
| 14FE681K | X | | | | | | 14 | MDC-FV-14E681K | 420 | 560 | 220 | 220 | 6000 | 4500 | 612 | 748 | 1120 | 50 | 290 |
| 14FM681K | X | | | | | | 14 | MDC-FV-14M681K | 420 | 560 | 220 | 220 | 6000 | 4500 | 612 | 748 | 1120 | 50 | 290 |
| 14FN681K | X | | | | | | 14 | MDC-FV-14N681K | 420 | 560 | 220 | 220 | 6000 | 4500 | 612 | 748 | 1120 | 50 | 290 |
| 20FE681K | X | | | | | | 20 | MDC-FV-20E681K | 420 | 560 | 455 | 455 | 10000 | 6000 | 612 | 748 | 1120 | 100 | 600 |
| 20FM681K | X | | | | | | 20 | MDC-FV-20M681K | 420 | 560 | 455 | 455 | 10000 | 6000 | 612 | 748 | 1120 | 100 | 600 |
| 20FN681K | X | | | | | | 20 | MDC-FV-20N681K | 420 | 560 | 455 | 455 | 10000 | 6000 | 612 | 748 | 1120 | 100 | 600 |
| 25FE681K | X | | | | | | 25 | MDC-FV-25E681K | 420 | 560 | 620 | 620 | 15000 | 12000 | 612 | 748 | 1120 | 150 | 950 |
| 25FM681K | X | | | | | | 25 | MDC-FV-25M681K | 420 | 560 | 620 | 620 | 15000 | 12000 | 612 | 748 | 1120 | 150 | 950 |
| 25FN681K | X | | | | | | 25 | MDC-FV-25N681K | 420 | 560 | 620 | 620 | 15000 | 12000 | 612 | 748 | 1120 | 150 | 950 |

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 File E321173 - Surge Protective Devices

D = VDE File 40017480

B = cUL File E321173 - Surge Protective Devices

E = SEV - 96.7 70250.01

C = CSA C22.2 File 033468

275VAC thru 420VAC VARISTORS

| Maida Style Number | MAX. Diameter (D) | MAX. Thickness (T) | MAX. Height (H) | Typical X Dimension | Typical X Tolerance | Typical Y Dimension | Typical Y Tolerance | Typical Z Dimension | Typical Z Tolerance | Typical Wire Diameter (d) |
|--------------------|-------------------|--------------------|-----------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------------|
| | (in) | (in) | (in) | (in) | (in) | (in) | (in) | (in) | (in) | (in) |
| 14FE431K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM431K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN431K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE431K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM431K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN431K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE431K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM431K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN431K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.150 | 0.030 | 0.492 | 0.039 | 0.040 |
| | | | | | | | | | | |
| 14FE471K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM471K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN471K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE471K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM471K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN471K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE471K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM471K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN471K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| | | | | | | | | | | |
| 14FE511K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM511K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN511K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE511K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM511K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN511K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE511K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM511K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN511K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| | | | | | | | | | | |
| 14FE561K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM561K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN561K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE561K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM561K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN561K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE561K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM561K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN561K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| | | | | | | | | | | |
| 14FE621K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM621K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN621K | 0.748 | 0.453 | 0.827 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE621K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM621K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN621K | 0.945 | 0.453 | 1.024 | 0.295 | 0.039 | 0.217 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE621K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM621K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN621K | 1.142 | 0.531 | 1.260 | 0.492 | 0.039 | 0.217 | 0.030 | 0.492 | 0.039 | 0.040 |
| | | | | | | | | | | |
| 14FE681K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM681K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN681K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE681K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM681K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN681K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE681K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM681K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN681K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |

NOTE: Alternate dimensional specifications, including lead styles, for any part listed may be available upon request. Please contact us for any inquiries.

THERMALLY PROTECTED SERIES

SPECIFICATIONS

460VAC thru 680VAC VARISTORS

| Maida Style Number | Recognitions To Safety Agency Standards | | | | | | Nominal Size (mm) | Minimum Marking | Maximum Ratings | | | | | | Electrical Characteristics | | | | |
|--------------------|---|--|--|--|--|----|-------------------|-----------------|-----------------|--------|-----------|---------------------|------------------|----------|----------------------------|------|---------------------------------------|-----|-----------------------------|
| | | | | | | | | | Continuous | | Transient | | | | Varistor Voltage @ 1 mA DC | | Max Clamping Voltage (@ Test Current) | | Typical Cap. 1 V rms @ 1kHz |
| | | | | | | | | | Applied Voltage | Energy | | Peak Current | | | | | | | |
| | | | | | | | | | | (AC) | (DC) | 10 x 1000 μ sec | 8 x 20 μ sec | # Pulses | | | | | |
| | | | | | | | | | | | | (V) | (V) | (A) | (A) | Vmin | Vmax | (V) | (A) |
| 14FE751K | | | | | | 14 | MDC-FV-14E751K | 460 | 615 | 225 | 225 | 6000 | 4500 | 675 | 825 | 1240 | 50 | 270 | |
| 14FM751K | | | | | | 14 | MDC-FV-14M751K | 460 | 615 | 225 | 225 | 6000 | 4500 | 675 | 825 | 1240 | 50 | 270 | |
| 14FN751K | | | | | | 14 | MDC-FV-14N751K | 460 | 615 | 225 | 225 | 6000 | 4500 | 675 | 825 | 1240 | 50 | 270 | |
| 20FE751K | | | | | | 20 | MDC-FV-20E751K | 460 | 615 | 455 | 455 | 10000 | 6000 | 675 | 825 | 1240 | 100 | 530 | |
| 20FM751K | | | | | | 20 | MDC-FV-20M751K | 460 | 615 | 455 | 455 | 10000 | 6000 | 675 | 825 | 1240 | 100 | 530 | |
| 20FN751K | | | | | | 20 | MDC-FV-20N751K | 460 | 615 | 455 | 455 | 10000 | 6000 | 675 | 825 | 1240 | 100 | 530 | |
| 25FE751K | | | | | | 25 | MDC-FV-25E751K | 460 | 615 | 630 | 630 | 15000 | 12000 | 675 | 825 | 1240 | 150 | 850 | |
| 25FM751K | | | | | | 25 | MDC-FV-25M751K | 460 | 615 | 630 | 630 | 15000 | 12000 | 675 | 825 | 1240 | 150 | 850 | |
| 25FN751K | | | | | | 25 | MDC-FV-25N751K | 460 | 615 | 630 | 630 | 15000 | 12000 | 675 | 825 | 1240 | 150 | 850 | |
| | | | | | | | | | | | | | | | | | | | |
| 14FE781K | | | | | | 14 | MDC-FV-14E781K | 485 | 640 | 240 | 240 | 6000 | 4500 | 702 | 858 | 1290 | 50 | 260 | |
| 14FM781K | | | | | | 14 | MDC-FV-14M781K | 485 | 640 | 240 | 240 | 6000 | 4500 | 702 | 858 | 1290 | 50 | 260 | |
| 14FN781K | | | | | | 14 | MDC-FV-14N781K | 485 | 640 | 240 | 240 | 6000 | 4500 | 702 | 858 | 1290 | 50 | 260 | |
| 20FE781K | | | | | | 20 | MDC-FV-20E781K | 485 | 640 | 455 | 455 | 10000 | 6000 | 702 | 858 | 1290 | 100 | 510 | |
| 20FM781K | | | | | | 20 | MDC-FV-20M781K | 485 | 640 | 455 | 455 | 10000 | 6000 | 702 | 858 | 1290 | 100 | 510 | |
| 20FN781K | | | | | | 20 | MDC-FV-20N781K | 485 | 640 | 455 | 455 | 10000 | 6000 | 702 | 858 | 1290 | 100 | 510 | |
| 25FE781K | | | | | | 25 | MDC-FV-25E781K | 485 | 640 | 675 | 675 | 15000 | 12000 | 702 | 858 | 1290 | 150 | 800 | |
| 25FM781K | | | | | | 25 | MDC-FV-25M781K | 485 | 640 | 675 | 675 | 15000 | 12000 | 702 | 858 | 1290 | 150 | 800 | |
| 25FN781K | | | | | | 25 | MDC-FV-25N781K | 485 | 640 | 675 | 675 | 15000 | 12000 | 702 | 858 | 1290 | 150 | 800 | |
| | | | | | | | | | | | | | | | | | | | |
| 14FE821K | | | | | | 14 | MDC-FV-14E821K | 510 | 670 | 245 | 245 | 6000 | 4500 | 738 | 902 | 1355 | 50 | 240 | |
| 14FM821K | | | | | | 14 | MDC-FV-14M821K | 510 | 670 | 245 | 245 | 6000 | 4500 | 738 | 902 | 1355 | 50 | 240 | |
| 14FN821K | | | | | | 14 | MDC-FV-14N821K | 510 | 670 | 245 | 245 | 6000 | 4500 | 738 | 902 | 1355 | 50 | 240 | |
| 20FE821K | | | | | | 20 | MDC-FV-20E821K | 510 | 670 | 475 | 475 | 10000 | 6000 | 738 | 902 | 1355 | 100 | 500 | |
| 20FM821K | | | | | | 20 | MDC-FV-20M821K | 510 | 670 | 475 | 475 | 10000 | 6000 | 738 | 902 | 1355 | 100 | 500 | |
| 20FN821K | | | | | | 20 | MDC-FV-20N821K | 510 | 670 | 475 | 475 | 10000 | 6000 | 738 | 902 | 1355 | 100 | 500 | |
| 25FE821K | | | | | | 25 | MDC-FV-25E821K | 510 | 670 | 690 | 690 | 15000 | 12000 | 738 | 902 | 1355 | 150 | 750 | |
| 25FM821K | | | | | | 25 | MDC-FV-25M821K | 510 | 670 | 690 | 690 | 15000 | 12000 | 738 | 902 | 1355 | 150 | 750 | |
| 25FN821K | | | | | | 25 | MDC-FV-25N821K | 510 | 670 | 690 | 690 | 15000 | 12000 | 738 | 902 | 1355 | 150 | 750 | |
| | | | | | | | | | | | | | | | | | | | |
| 14FE911K | | | | | | 14 | MDC-FV-14E911K | 550 | 745 | 255 | 255 | 6000 | 4500 | 819 | 1001 | 1500 | 50 | 220 | |
| 14FM911K | | | | | | 14 | MDC-FV-14M911K | 550 | 745 | 255 | 255 | 6000 | 4500 | 819 | 1001 | 1500 | 50 | 220 | |
| 14FN911K | | | | | | 14 | MDC-FV-14N911K | 550 | 745 | 255 | 255 | 6000 | 4500 | 819 | 1001 | 1500 | 50 | 220 | |
| 20FE911K | | | | | | 20 | MDC-FV-20E911K | 550 | 745 | 500 | 500 | 10000 | 6000 | 819 | 1001 | 1500 | 100 | 440 | |
| 20FM911K | | | | | | 20 | MDC-FV-20M911K | 550 | 745 | 500 | 500 | 10000 | 6000 | 819 | 1001 | 1500 | 100 | 440 | |
| 20FN911K | | | | | | 20 | MDC-FV-20N911K | 550 | 745 | 500 | 500 | 10000 | 6000 | 819 | 1001 | 1500 | 100 | 440 | |
| 25FE911K | | | | | | 25 | MDC-FV-25E911K | 550 | 745 | 715 | 715 | 15000 | 12000 | 819 | 1001 | 1500 | 150 | 700 | |
| 25FM911K | | | | | | 25 | MDC-FV-25M911K | 550 | 745 | 715 | 715 | 15000 | 12000 | 819 | 1001 | 1500 | 150 | 700 | |
| 25FN911K | | | | | | 25 | MDC-FV-25N911K | 550 | 745 | 715 | 715 | 15000 | 12000 | 819 | 1001 | 1500 | 150 | 700 | |
| | | | | | | | | | | | | | | | | | | | |
| 14FE102K | | | | | | 14 | MDC-FV-14E102K | 625 | 825 | 280 | 280 | 6000 | 4500 | 900 | 1100 | 1650 | 50 | 200 | |
| 14FM102K | | | | | | 14 | MDC-FV-14M102K | 625 | 825 | 280 | 280 | 6000 | 4500 | 900 | 1100 | 1650 | 50 | 200 | |
| 14FN102K | | | | | | 14 | MDC-FV-14N102K | 625 | 825 | 280 | 280 | 6000 | 4500 | 900 | 1100 | 1650 | 50 | 200 | |
| 20FE102K | | | | | | 20 | MDC-FV-20E102K | 625 | 825 | 560 | 560 | 10000 | 6000 | 900 | 1100 | 1650 | 100 | 400 | |
| 20FM102K | | | | | | 20 | MDC-FV-20M102K | 625 | 825 | 560 | 560 | 10000 | 6000 | 900 | 1100 | 1650 | 100 | 400 | |
| 20FN102K | | | | | | 20 | MDC-FV-20N102K | 625 | 825 | 560 | 560 | 10000 | 6000 | 900 | 1100 | 1650 | 100 | 400 | |
| 25FE102K | | | | | | 25 | MDC-FV-25E102K | 625 | 825 | 750 | 750 | 15000 | 12000 | 900 | 1100 | 1650 | 150 | 650 | |
| 25FM102K | | | | | | 25 | MDC-FV-25M102K | 625 | 825 | 750 | 750 | 15000 | 12000 | 900 | 1100 | 1650 | 150 | 650 | |
| 25FN102K | | | | | | 25 | MDC-FV-25N102K | 625 | 825 | 750 | 750 | 15000 | 12000 | 900 | 1100 | 1650 | 150 | 650 | |
| | | | | | | | | | | | | | | | | | | | |
| 14FE112K | | | | | | 14 | MDC-FV-14E112K | 680 | 895 | 310 | 310 | 6000 | 4500 | 990 | 1210 | 1815 | 50 | 180 | |
| 14FM112K | | | | | | 14 | MDC-FV-14M112K | 680 | 895 | 310 | 310 | 6000 | 4500 | 990 | 1210 | 1815 | 50 | 180 | |
| 14FN112K | | | | | | 14 | MDC-FV-14N112K | 680 | 895 | 310 | 310 | 6000 | 4500 | 990 | 1210 | 1815 | 50 | 180 | |
| 20FE112K | | | | | | 20 | MDC-FV-20E112K | 680 | 895 | 610 | 610 | 10000 | 6000 | 990 | 1210 | 1815 | 100 | 360 | |
| 20FM112K | | | | | | 20 | MDC-FV-20M112K | 680 | 895 | 610 | 610 | 10000 | 6000 | 990 | 1210 | 1815 | 100 | 360 | |
| 20FN112K | | | | | | 20 | MDC-FV-20N112K | 680 | 895 | 610 | 610 | 10000 | 6000 | 990 | 1210 | 1815 | 100 | 360 | |
| 25FE112K | | | | | | 25 | MDC-FV-25E112K | 680 | 895 | 780 | 780 | 15000 | 12000 | 990 | 1210 | 1815 | 150 | 600 | |
| 25FM112K | | | | | | 25 | MDC-FV-25M112K | 680 | 895 | 780 | 780 | 15000 | 12000 | 990 | 1210 | 1815 | 150 | 600 | |
| 25FN112K | | | | | | 25 | MDC-FV-25N112K | 680 | 895 | 780 | 780 | 15000 | 12000 | 990 | 1210 | 1815 | 150 | 600 | |

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 File E321173 - Surge Protective Devices

D = VDE File 40017480

B = cUL File E321173 - Surge Protective Devices

E = SEV - 96.7 70250.01

C = CSA C22.2 File 033468

460VAC thru 680VAC VARISTORS

| Maida Style Number | MAX. Diameter (D) | MAX. Thickness (T) | MAX. Height (H) | Typical X Dimension | Typical X Tolerance | Typical Y Dimension | Typical Y Tolerance | Typical Z Dimension | Typical Z Tolerance | Typical Wire Diameter (d) |
|--------------------|-------------------|--------------------|-----------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------------|
| | (in) | (in) | (in) | (in) | (in) | (in) | (in) | (in) | (in) | (in) |
| 14FE751K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM751K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN751K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE751K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM751K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN751K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE751K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM751K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN751K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| Separator | | | | | | | | | | |
| 14FE781K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM781K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN781K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE781K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM781K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN781K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE781K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM781K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN781K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| Separator | | | | | | | | | | |
| 14FE821K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM821K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN821K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE821K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM821K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN821K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE821K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM821K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN821K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| Separator | | | | | | | | | | |
| 14FE911K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM911K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN911K | 0.748 | 0.543 | 0.827 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE911K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM911K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN911K | 0.945 | 0.543 | 1.024 | 0.295 | 0.039 | 0.307 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE911K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM911K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN911K | 1.142 | 0.622 | 1.260 | 0.492 | 0.039 | 0.307 | 0.030 | 0.492 | 0.039 | 0.040 |
| Separator | | | | | | | | | | |
| 14FE102K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM102K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN102K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE102K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM102K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN102K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE102K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM102K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN102K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |
| Separator | | | | | | | | | | |
| 14FE112K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM112K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN112K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE112K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM112K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN112K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE112K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM112K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN112K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |

NOTE: Alternate dimensional specifications, including lead styles, for any part listed may be available upon request. Please contact us for any inquiries.

THERMALLY PROTECTED SERIES

SPECIFICATIONS

750VAC VARISTORS

| Maida Style Number | Recognitions To Safety Agency Standards | | | | | | Nominal Size | Minimum Marking | Maximum Ratings | | | | | | Electrical Characteristics | | | | |
|--------------------|---|---|---|---|---|------|----------------|-----------------|-----------------|------|------------------------|---------------------|----------------------------------|------|------------------------------|------|--|-----|-------------------------|
| | | | | | | | | | Continuous | | Transient | | | | Varistor Voltage @1 mA DC | | Max Clamping Voltage (@ Test Current) | | Typical Cap. @ 1 kHz |
| | | | | | | | | | Applied Voltage | | Energy | | Peak Current 8 x 20 μ sec | | | | | | |
| | | | | | | | | | | | 10 x 1000 μ sec | 8 x 20 μ sec | # Pulses | | | | | | |
| | | | | | | | | | (AC) | (DC) | (J) | (J) | 1 | 2 | Vmin | Vmax | (8 x 20 μ sec) | | |
| A | B | C | D | E | F | (mm) | | (V) | (V) | (V) | (A) | (pF) | | | | | | | |
| 14FE122K | | | | | | 14 | MDC-FV-14E122K | 750 | 990 | 310 | 310 | 6000 | 4500 | 1080 | 1320 | 1980 | 50 | 150 | |
| 14FM122K | | | | | | 14 | MDC-FV-14M122K | 750 | 990 | 310 | 310 | 6000 | 4500 | 1080 | 1320 | 1980 | 50 | 150 | |
| 14FN122K | | | | | | 14 | MDC-FV-14N122K | 750 | 990 | 310 | 310 | 6000 | 4500 | 1080 | 1320 | 1980 | 50 | 150 | |
| 20FE122K | | | | | | 20 | MDC-FV-20E122K | 750 | 990 | 650 | 650 | 10000 | 6000 | 1080 | 1320 | 1980 | 100 | 320 | |
| 20FM122K | | | | | | 20 | MDC-FV-20M122K | 750 | 990 | 650 | 650 | 10000 | 6000 | 1080 | 1320 | 1980 | 100 | 320 | |
| 20FN122K | | | | | | 20 | MDC-FV-20N122K | 750 | 990 | 650 | 650 | 10000 | 6000 | 1080 | 1320 | 1980 | 100 | 320 | |
| 25FE122K | | | | | | 25 | MDC-FV-25E122K | 750 | 990 | 840 | 840 | 15000 | 12000 | 1080 | 1320 | 1980 | 150 | 550 | |
| 25FM122K | | | | | | 25 | MDC-FV-25M122K | 750 | 990 | 840 | 840 | 15000 | 12000 | 1080 | 1320 | 1980 | 150 | 550 | |
| 25FN122K | | | | | | 25 | MDC-FV-25N122K | 750 | 990 | 840 | 840 | 15000 | 12000 | 1080 | 1320 | 1980 | 150 | 550 | |

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 File E321173 - Surge Protective Devices

D = VDE File 40017480

B = cUL File E321173 - Surge Protective Devices

E = SEV - 96.7 70250.01

C = CSA C22.2 File 033468

750VAC VARISTORS

| Maida Style Number | MAX. Diameter (D) (in) | MAX. Thickness (T) (in) | MAX. Height (H) (in) | Typical X Dimension (in) | Typical X Tolerance (in) | Typical Y Dimension (in) | Typical Y Tolerance (in) | Typical Z Dimension (in) | Typical Z Tolerance (in) | Typical Wire Diameter (d) (in) |
|--------------------|---------------------------|----------------------------|-------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------------|
| 14FE122K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FM122K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 14FN122K | 0.748 | 0.630 | 0.827 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.032 |
| 20FE122K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FM122K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 20FN122K | 0.945 | 0.630 | 1.024 | 0.295 | 0.039 | 0.394 | 0.030 | 0.295 | 0.039 | 0.040 |
| 25FE122K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FM122K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |
| 25FN122K | 1.142 | 0.709 | 1.260 | 0.492 | 0.039 | 0.394 | 0.030 | 0.492 | 0.039 | 0.040 |

NOTE: Alternate dimensional specifications, including lead styles, for any part listed may be available upon request. Please contact us for any inquiries.