

Varistors — continued

Metal Oxide Varistors cont.

12.5mm Disc

| Mfrs. List No.   | Lead Pitch (offset) | Disc Dia. | Disc W  | Disc H | Lead L | Lead D |
|------------------|---------------------|-----------|---------|--------|--------|--------|
| SIOV-S10K11-40   | 5                   | 12.5      | 4.1-4.8 | 15.0   | 30     | 0.8    |
| SIOV-S10K50-300  | 5                   | 12.5      | 4.1-6.1 | 15.0   | 30     | 0.8    |
| SIOV-S10K320-460 | 5                   | 12.6      | 6.3-7.7 | 15.0   | 30     | 0.8    |

| V <sub>RMS</sub> | V <sub>DC</sub> | V <sub>V(1mA)</sub> | Transient Energy (J) | Peak Transient Current (A) | Mfrs. List No. | Order Code |
|------------------|-----------------|---------------------|----------------------|----------------------------|----------------|------------|
| 11               | 14              | 18                  | 1.7                  | 500                        | S10K11         | 502-674    |
| 14               | 18              | 22                  | 2.0                  | 500                        | S10K14         | 502-285    |
| 17               | 22              | 27                  | 2.5                  | 500                        | S10K17         | 502-480    |
| 20               | 26              | 33                  | 3.1                  | 500                        | S10K20         | 502-595    |
| 25               | 31              | 39                  | 3.7                  | 500                        | S10K25         | 500-926    |
| 30               | 38              | 47                  | 4.4                  | 500                        | S10K30         | 580-181    |
| 35               | 45              | 56                  | 5.4                  | 500                        | S10K35         | 502-194    |
| 40               | 56              | 68                  | 6.4                  | 500                        | S10K40         | 502-303    |
| 50               | 65              | 82                  | 8.4                  | 2500                       | S10K50         | 502-110    |
| 60               | 85              | 100                 | 10                   | 2500                       | S10K60         | 500-938    |
| 75               | 100             | 120                 | 12                   | 2500                       | S10K75         | 502-650    |
| 95               | 125             | 150                 | 15                   | 2500                       | S10K95         | 502-625    |
| 115              | 150             | 180                 | 18                   | 2500                       | S10K115        | 752-472    |
| 130              | 170             | 205                 | 19                   | 2500                       | S10K130        | 502-212    |
| 140              | 180             | 220                 | 22                   | 2500                       | S10K140        | 752-514    |
| 150              | 200             | 240                 | 24                   | 2500                       | S10K150        | 502-297    |
| 175              | 225             | 270                 | 28                   | 2500                       | S10K175        | 502-832    |
| 230              | 300             | 360                 | 36                   | 2500                       | S10K230        | 580-211    |
| 250              | 320             | 390                 | 38                   | 2500                       | S10K250        | 580-223    |
| 275              | 350             | 430                 | 43                   | 2500                       | S10K275        | 752-551    |
| 300              | 385             | 470                 | 47                   | 2500                       | S10K300        | 580-302    |
| 320              | 420             | 510                 | 50                   | 2500                       | S10K320        | 502-777    |
| 385              | 505             | 620                 | 40                   | 2500                       | S10K385        | 976-362    |
| 420              | 560             | 680                 | 45                   | 2500                       | S10K420        | 502-315    |
| 460              | 615             | 750                 | 50                   | 2500                       | S10K460        | 502-157    |

FIL249

Price Each

| AC Voltage | Order Code | 1+ | 10+ | 25+ | 250+ | 500+ | 1K+ |
|------------|------------|----|-----|-----|------|------|-----|
| 11         | 502-674    |    |     |     |      |      |     |
| 14         | 502-285    |    |     |     |      |      |     |
| 17         | 502-480    |    |     |     |      |      |     |
| 20         | 502-595    |    |     |     |      |      |     |
| 25         | 500-926    |    |     |     |      |      |     |
| 30         | 580-181    |    |     |     |      |      |     |
| 35         | 502-194    |    |     |     |      |      |     |
| 40         | 502-303    |    |     |     |      |      |     |
| 50         | 502-110    |    |     |     |      |      |     |
| 60         | 500-938    |    |     |     |      |      |     |
| 75         | 502-650    |    |     |     |      |      |     |
| 95         | 502-625    |    |     |     |      |      |     |
| 115        | 752-472    |    |     |     |      |      |     |
| 130        | 502-212    |    |     |     |      |      |     |
| 140        | 752-514    |    |     |     |      |      |     |
| 150        | 502-297    |    |     |     |      |      |     |
| 175        | 502-832    |    |     |     |      |      |     |
| 230        | 580-211    |    |     |     |      |      |     |
| 250        | 580-223    |    |     |     |      |      |     |
| 275        | 752-551    |    |     |     |      |      |     |
| 300        | 580-302    |    |     |     |      |      |     |
| 320        | 502-777    |    |     |     |      |      |     |
| 385        | 976-362    |    |     |     |      |      |     |
| 420        | 502-315    |    |     |     |      |      |     |
| 460        | 502-157    |    |     |     |      |      |     |

16.5mm Disc

| Mfrs. List No.   | Lead Pitch (offset) | Disc Dia. | Disc W  | Disc H | Lead L | Lead D |
|------------------|---------------------|-----------|---------|--------|--------|--------|
| SIOV-S14K11-40   | 7.5                 | 16.5      | 4.1-4.9 | 19.0   | 30     | 0.8    |
| SIOV-S14K50-300  | 7.5                 | 16.5      | 4.1-6.1 | 19.0   | 30     | 0.8    |
| SIOV-S14K320-460 | 7.5                 | 16.5      | 6.3-7.8 | 19.0   | 30     | 0.8    |

| V <sub>RMS</sub> | V <sub>DC</sub> | V <sub>V(1mA)</sub> | Transient Energy (J) | Peak Transient Current (A) | Mfrs. List No. | Order Code |
|------------------|-----------------|---------------------|----------------------|----------------------------|----------------|------------|
| 11               | 14              | 18                  | 3.2                  | 1000                       | S14K11         | 502-637    |
| 14               | 18              | 22                  | 4                    | 1000                       | S14K14         | 502-261    |
| 17               | 22              | 27                  | 5                    | 1000                       | S14K17         | 502-741    |
| 20               | 26              | 33                  | 6                    | 1000                       | S14K20         | 502-455    |
| 25               | 31              | 39                  | 7                    | 1000                       | S14K25         | 580-168    |
| 30               | 38              | 47                  | 9                    | 1000                       | S14K30         | 752-370    |
| 35               | 45              | 56                  | 10                   | 1000                       | S14K35         | 752-393    |
| 40               | 56              | 68                  | 13                   | 1000                       | S14K40         | 752-400    |
| 50               | 65              | 82                  | 15                   | 4500                       | S14K50         | 752-411    |
| 60               | 85              | 100                 | 17                   | 4500                       | S14K60         | 752-423    |
| 75               | 100             | 120                 | 20                   | 4500                       | S14K75         | 752-435    |
| 95               | 125             | 150                 | 25                   | 4500                       | S14K95         | 752-459    |
| 115              | 150             | 180                 | 30                   | 4500                       | S14K115        | 752-484    |
| 130              | 170             | 205                 | 34                   | 4500                       | S14K130        | 752-502    |
| 140              | 180             | 220                 | 36                   | 4500                       | S14K140        | 502-730    |
| 150              | 200             | 240                 | 40                   | 4500                       | S14K150        | 502-182    |
| 175              | 225             | 270                 | 46                   | 4500                       | S14K175        | 502-662    |
| 230              | 300             | 360                 | 60                   | 4500                       | S14K230        | 752-540    |
| 250              | 320             | 390                 | 65                   | 4500                       | S14K250        | 580-235    |
| 275              | 350             | 430                 | 71                   | 4500                       | S14K275        | 580-272    |
| 300              | 385             | 470                 | 76                   | 4500                       | S14K300        | 752-563    |
| 320              | 420             | 510                 | 84                   | 4500                       | S14K320        | 502-571    |
| 385              | 505             | 620                 | 80                   | 4500                       | S14K385        | 580-326    |
| 420              | 560             | 680                 | 90                   | 4500                       | S14K420        | 580-338    |
| 460              | 615             | 750                 | 100                  | 4500                       | S14K460        | 500-914    |

FIL250

Price Each

| AC Voltage | Order Code | 1+ | 10+ | 25+ | 250+ | 500+ | 1K+ |
|------------|------------|----|-----|-----|------|------|-----|
| 11         | 502-637    |    |     |     |      |      |     |
| 14         | 502-261    |    |     |     |      |      |     |
| 17         | 502-741    |    |     |     |      |      |     |
| 20         | 502-455    |    |     |     |      |      |     |
| 25         | 580-168    |    |     |     |      |      |     |
| 30         | 752-370    |    |     |     |      |      |     |
| 35         | 752-393    |    |     |     |      |      |     |
| 40         | 752-400    |    |     |     |      |      |     |
| 50         | 752-411    |    |     |     |      |      |     |
| 60         | 752-423    |    |     |     |      |      |     |
| 75         | 752-435    |    |     |     |      |      |     |
| 95         | 752-459    |    |     |     |      |      |     |
| 115        | 752-484    |    |     |     |      |      |     |
| 130        | 752-502    |    |     |     |      |      |     |
| 140        | 502-730    |    |     |     |      |      |     |
| 150        | 502-182    |    |     |     |      |      |     |
| 175        | 502-662    |    |     |     |      |      |     |
| 230        | 752-540    |    |     |     |      |      |     |
| 250        | 580-235    |    |     |     |      |      |     |
| 275        | 580-272    |    |     |     |      |      |     |
| 300        | 752-563    |    |     |     |      |      |     |
| 320        | 502-571    |    |     |     |      |      |     |
| 385        | 580-326    |    |     |     |      |      |     |
| 420        | 580-338    |    |     |     |      |      |     |
| 460        | 500-914    |    |     |     |      |      |     |

22.5mm Disc

| Mfrs. List No.   | Lead Pitch (offset) | Disc Dia. | Disc W  | Disc H | Lead L | Lead D |
|------------------|---------------------|-----------|---------|--------|--------|--------|
| SIOV-S20K11-40   | 10                  | 22.5      | 4.5-5.4 | 26     | 30     | 1.0    |
| SIOV-S20K50-175  | 10                  | 22.5      | 4.5-5.3 | 26     | 30     | 1.0    |
| SIOV-S20K230-300 | 10                  | 22.5      | 5.9-6.6 | 27     | 30     | 1.0    |
| SIOV-S20K320-460 | 10                  | 22.5      | 6.8-8.2 | 27     | 30     | 1.0    |

| V <sub>RMS</sub> | V <sub>DC</sub> | V <sub>V(1mA)</sub> | Transient Energy (J) | Peak Transient Current (A) | Mfrs. List No. | Order Code |
|------------------|-----------------|---------------------|----------------------|----------------------------|----------------|------------|
| 11               | 14              | 18                  | 10                   | 2000                       | S20K11         | 502-704    |
| 14               | 18              | 22                  | 12                   | 2000                       | S20K14         | 502-765    |
| 17               | 22              | 27                  | 14                   | 2000                       | S20K17         | 502-583    |
| 20               | 26              | 33                  | 18                   | 2000                       | S20K20         | 502-649    |
| 25               | 31              | 39                  | 22                   | 2000                       | S20K25         | 502-169    |
| 30               | 38              | 47                  | 26                   | 2000                       | S20K30         | 500-940    |
| 35               | 45              | 56                  | 33                   | 2000                       | S20K35         | 502-601    |
| 40               | 56              | 68                  | 37                   | 2000                       | S20K40         | 502-546    |
| 50               | 65              | 82                  | 27                   | 6500                       | S20K50         | 502-327    |
| 60               | 85              | 100                 | 33                   | 6500                       | S20K60         | 502-133    |
| 75               | 100             | 120                 | 40                   | 6500                       | S20K75         | 502-339    |
| 95               | 125             | 150                 | 50                   | 6500                       | S20K95         | 502-420    |
| 115              | 150             | 180                 | 60                   | 6500                       | S20K115        | 752-496    |
| 130              | 170             | 205                 | 74                   | 8000                       | S20K130        | 502-145    |
| 140              | 180             | 220                 | 78                   | 8000                       | S20K140        | 752-526    |
| 150              | 200             | 240                 | 85                   | 8000                       | S20K150        | 502-224    |
| 175              | 225             | 270                 | 98                   | 8000                       | S20K175        | 580-193    |
| 230              | 300             | 360                 | 130                  | 8000                       | S20K230        | 502-200    |
| 250              | 320             | 390                 | 140                  | 8000                       | S20K250        | 580-247    |
| 275              | 350             | 430                 | 151                  | 8000                       | S20K275        | 580-284    |
| 300              | 385             | 470                 | 173                  | 8000                       | S20K300        | 752-575    |
| 320              | 420             | 510                 | 184                  | 8000                       | S20K320        | 502-443    |
| 385              | 505             | 620                 | 150                  | 8000                       | S20K385        | 752-599    |
| 420              | 560             | 680                 | 175                  | 8000                       | S20K420        | 752-605    |
| 460              | 615             | 750                 | 195                  | 8000                       | S20K460        | 500-902    |

FIL251

Price Each

| Order Code | 1+ | 10+ | 25+ | 250+ | 500+ | 1K+ |
|------------|----|-----|-----|------|------|-----|
| All Values |    |     |     |      |      |     |

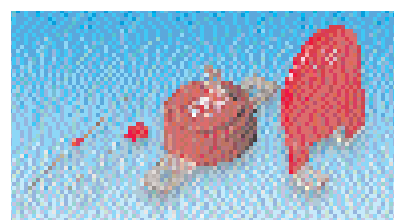
Harris Semiconductor Varistors



These varistors are voltage dependent, symmetrical, metal oxide semiconductor devices. Their characteristics enable them to protect against high transient voltage spikes (when properly selected) to meet anticipated loads. When the protected equipment or circuit encounters high voltage spikes, the varistor impedance changes from a very high standby value to a very low conducting value, thus clamping the transient voltage to a protective level. The excess energy of the incoming high voltage pulse is absorbed by the varistor, protecting voltage sensitive components against damage.

FIL39

Metal Oxide Varistors – PA/MA/LA/ZA/HA Series



Package k. Package a. Packages b, c, d, e, g, h. Packages l, m, n.