

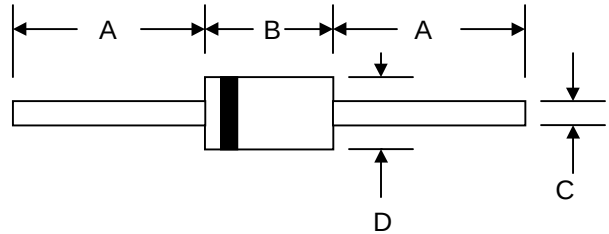


# SA5.0/A/C/CA – SA170/A/C/CA

## 500W TRANSIENT VOLTAGE SUPPRESSORS

### Features

- Glass Passivated Die Construction
- 500W Peak Pulse Power Dissipation
- 5.0V – 170V Standoff Voltage
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O



### Mechanical Data

- Case: JEDEC DO-15 Low Profile Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking:  
Unidirectional – Device Code and Cathode Band  
Bidirectional – Device Code Only
- Weight: 0.40 grams (approx.)

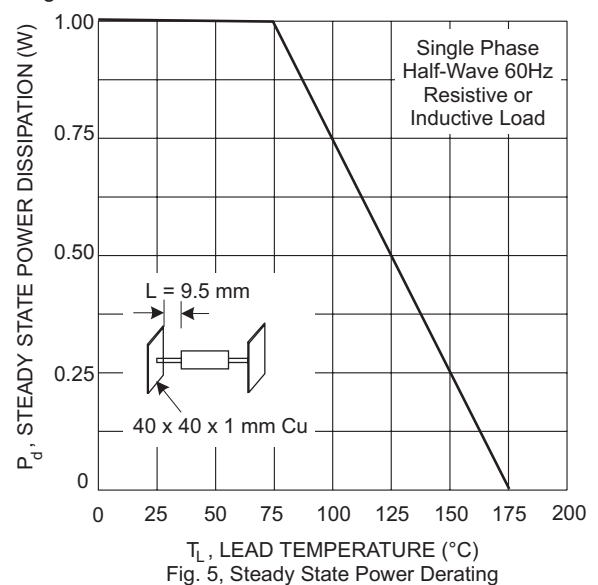
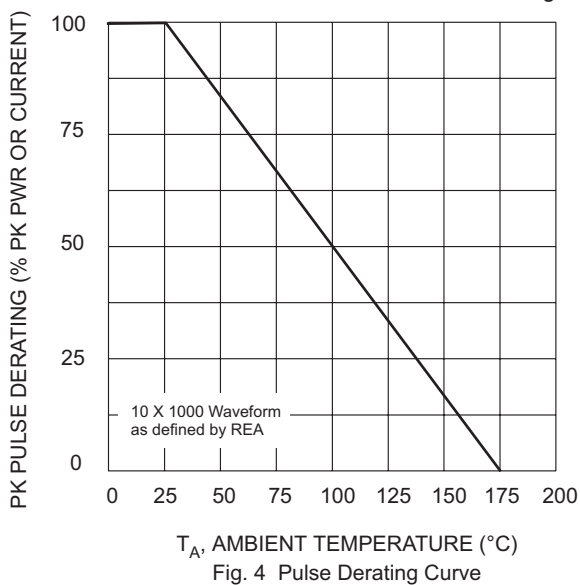
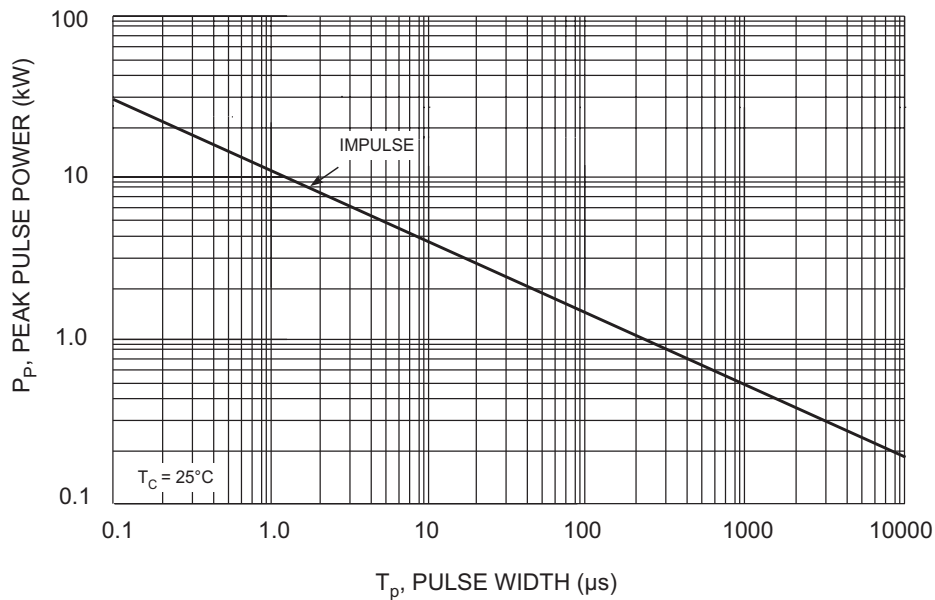
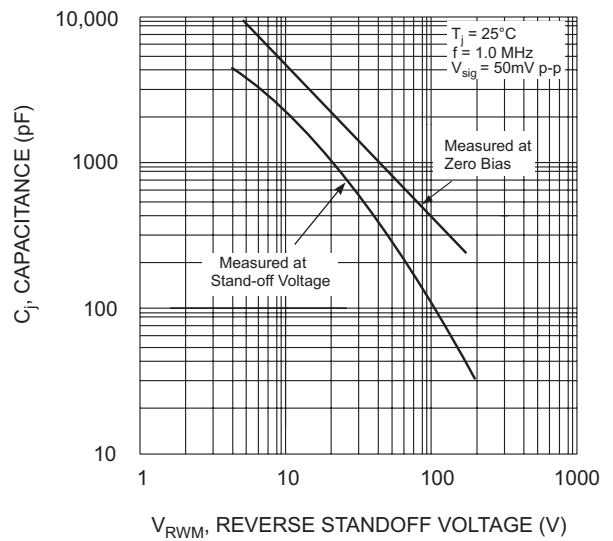
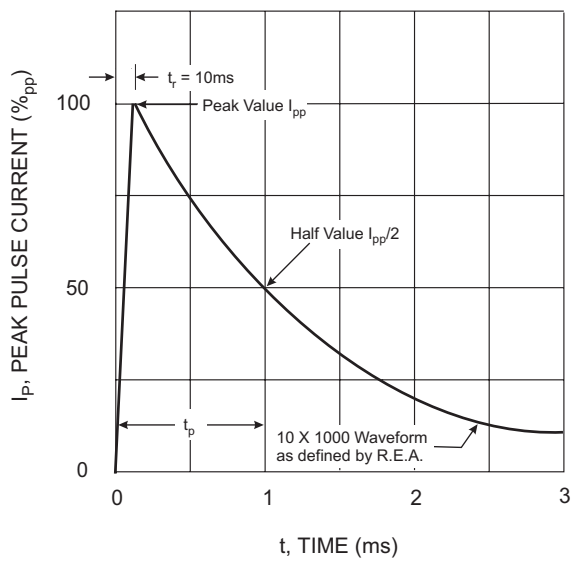
| DO-15                |      |       |
|----------------------|------|-------|
| Dim                  | Min  | Max   |
| A                    | 25.4 | —     |
| B                    | 5.50 | 7.62  |
| C                    | 0.71 | 0.864 |
| D                    | 2.60 | 3.60  |
| All Dimensions in mm |      |       |

“C” Suffix Designates Bi-directional Devices  
 “A” Suffix Designates 5% Tolerance Devices  
 No Suffix Designates 10% Tolerance Devices

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

| Characteristic                                                                | Symbol                            | Value       | Unit |
|-------------------------------------------------------------------------------|-----------------------------------|-------------|------|
| Peak Pulse Power Dissipation at T <sub>A</sub> = 25°C (Note 1, 2, 5) Figure 3 | P <sub>PPM</sub>                  | 500 Minimum | W    |
| Peak Forward Surge Current (Note 3)                                           | I <sub>FSM</sub>                  | 70          | A    |
| Peak Pulse Current on 10/1000μS Waveform (Note 1) Figure 1                    | I <sub>PPM</sub>                  | See Table 1 | A    |
| Steady State Power Dissipation (Note 2, 4)                                    | P <sub>M(AV)</sub>                | 1.0         | W    |
| Operating and Storage Temperature Range                                       | T <sub>J</sub> , T <sub>STG</sub> | -65 to +175 | °C   |

Note: 1. Non-repetitive current pulse, per Figure 1 and derated above T<sub>A</sub> = 25°C per Figure 4.  
 2. Mounted on 40mm<sup>2</sup> copper pad.  
 3. 8.3ms single half sine-wave duty cycle = 4 pulses per minutes maximum.  
 4. Lead temperature at 75°C = T<sub>L</sub>.  
 5. Peak pulse power waveform is 10/1000μS.



## UNI-DIRECTIONAL 500 WATT AXIAL LEAD TVS

| UNI-DIRECTIONAL<br>PART NUMBER | REVERSE<br>STAND-OFF<br>VOLTAGE VRWM (V) | BREAKDOWN<br>VOLTAGE<br>VBR (V) MIN. @IT | BREAKDOWN<br>VOLTAGE<br>VBR (V) MAX. @IT | TEST<br>CURRENT<br>IT (mA) | MAXIMUM CLAMPING<br>VOLTAGE @Ipp Vc (V) | PEAK PULSE<br>CURRENT<br>Ipp (A) | REVERSE<br>LEAKAGE<br>@VRWM IR (uA) |
|--------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|----------------------------|-----------------------------------------|----------------------------------|-------------------------------------|
| SA5.0                          | 5.00                                     | 6.40                                     | 7.30                                     | 10                         | 9.6                                     | 52.3                             | 600                                 |
| SA5.0A                         | 5.00                                     | 6.40                                     | 7.00                                     | 10                         | 9.2                                     | 54.3                             | 600                                 |
| SA6.0                          | 6.00                                     | 6.67                                     | 8.15                                     | 10                         | 11.4                                    | 43.9                             | 600                                 |
| SA6.0A                         | 6.00                                     | 6.67                                     | 7.37                                     | 10                         | 10.3                                    | 48.5                             | 600                                 |
| SA6.5                          | 6.50                                     | 7.22                                     | 8.82                                     | 10                         | 12.3                                    | 40.7                             | 400                                 |
| SA6.5A                         | 6.50                                     | 7.22                                     | 7.98                                     | 10                         | 11.2                                    | 44.7                             | 400                                 |
| SA7.0                          | 7.00                                     | 7.78                                     | 9.51                                     | 10                         | 13.3                                    | 37.8                             | 150                                 |
| SA7.0A                         | 7.00                                     | 7.78                                     | 8.60                                     | 10                         | 12.0                                    | 41.7                             | 150                                 |
| SA7.5                          | 7.50                                     | 8.33                                     | 10.20                                    | 1                          | 14.3                                    | 35.0                             | 50                                  |
| SA7.5A                         | 7.50                                     | 8.33                                     | 9.21                                     | 1                          | 12.9                                    | 38.8                             | 50                                  |
| SA8.0                          | 8.00                                     | 8.99                                     | 10.90                                    | 1                          | 15.0                                    | 33.3                             | 25                                  |
| SA8.0A                         | 8.00                                     | 8.99                                     | 9.83                                     | 1                          | 13.6                                    | 36.7                             | 25                                  |
| SA8.5                          | 8.50                                     | 9.44                                     | 11.50                                    | 1                          | 15.9                                    | 31.4                             | 10                                  |
| SA8.5A                         | 8.50                                     | 9.44                                     | 10.40                                    | 1                          | 14.4                                    | 34.7                             | 10                                  |
| SA9.0                          | 9.00                                     | 10.00                                    | 12.20                                    | 1                          | 16.9                                    | 29.5                             | 5                                   |
| SA9.0A                         | 9.00                                     | 10.00                                    | 11.10                                    | 1                          | 15.4                                    | 32.5                             | 5                                   |
| SA10                           | 10.00                                    | 11.10                                    | 13.60                                    | 1                          | 18.8                                    | 26.6                             | 3                                   |
| SA10A                          | 10.00                                    | 11.10                                    | 12.30                                    | 1                          | 17.0                                    | 29.4                             | 3                                   |
| SA11                           | 11.00                                    | 12.20                                    | 14.90                                    | 1                          | 20.1                                    | 24.9                             | 3                                   |
| SA11A                          | 11.00                                    | 12.20                                    | 13.50                                    | 1                          | 18.2                                    | 27.4                             | 3                                   |
| SA12                           | 12.00                                    | 13.30                                    | 16.30                                    | 1                          | 22.0                                    | 22.7                             | 3                                   |
| SA12A                          | 12.00                                    | 13.30                                    | 14.70                                    | 1                          | 19.9                                    | 25.1                             | 3                                   |
| SA13                           | 13.00                                    | 14.40                                    | 17.60                                    | 1                          | 23.8                                    | 21.0                             | 3                                   |
| SA13A                          | 13.00                                    | 14.40                                    | 15.90                                    | 1                          | 21.5                                    | 23.2                             | 3                                   |
| SA14                           | 14.00                                    | 15.60                                    | 19.10                                    | 1                          | 25.8                                    | 19.4                             | 3                                   |
| SA14A                          | 14.00                                    | 15.60                                    | 17.20                                    | 1                          | 23.2                                    | 21.5                             | 3                                   |
| SA15                           | 15.00                                    | 16.70                                    | 20.40                                    | 1                          | 26.9                                    | 18.8                             | 3                                   |
| SA15A                          | 15.00                                    | 16.70                                    | 18.50                                    | 1                          | 24.4                                    | 20.6                             | 3                                   |
| SA16                           | 16.00                                    | 17.80                                    | 21.80                                    | 1                          | 28.8                                    | 17.6                             | 3                                   |
| SA16A                          | 16.00                                    | 17.80                                    | 19.70                                    | 1                          | 26.0                                    | 19.2                             | 3                                   |
| SA17                           | 17.00                                    | 18.90                                    | 23.10                                    | 1                          | 30.5                                    | 16.4                             | 3                                   |
| SA17A                          | 17.00                                    | 18.90                                    | 20.90                                    | 1                          | 27.6                                    | 16.1                             | 3                                   |
| SA18                           | 18.00                                    | 20.00                                    | 24.40                                    | 1                          | 32.2                                    | 15.5                             | 3                                   |
| SA18A                          | 18.00                                    | 20.00                                    | 22.10                                    | 1                          | 29.2                                    | 17.2                             | 3                                   |
| SA20                           | 20.00                                    | 22.20                                    | 27.10                                    | 1                          | 35.8                                    | 13.9                             | 3                                   |
| SA20A                          | 20.00                                    | 22.20                                    | 24.50                                    | 1                          | 32.4                                    | 15.4                             | 3                                   |
| SA22                           | 22.00                                    | 24.40                                    | 29.80                                    | 1                          | 39.4                                    | 12.7                             | 3                                   |
| SA22A                          | 22.00                                    | 24.40                                    | 26.90                                    | 1                          | 35.5                                    | 14.1                             | 3                                   |
| SA24                           | 24.00                                    | 26.70                                    | 32.60                                    | 1                          | 43.0                                    | 11.6                             | 3                                   |
| SA24A                          | 24.00                                    | 26.70                                    | 29.50                                    | 1                          | 38.9                                    | 12.8                             | 3                                   |
| SA26                           | 26.00                                    | 28.90                                    | 35.30                                    | 1                          | 46.6                                    | 10.7                             | 3                                   |
| SA26A                          | 26.00                                    | 28.90                                    | 31.90                                    | 1                          | 42.1                                    | 11.9                             | 3                                   |
| SA28                           | 28.00                                    | 31.10                                    | 38.00                                    | 1                          | 50.0                                    | 9.9                              | 3                                   |
| SA28A                          | 28.00                                    | 31.10                                    | 34.40                                    | 1                          | 45.4                                    | 11.0                             | 3                                   |
| SA30                           | 30.00                                    | 33.30                                    | 40.70                                    | 1                          | 53.5                                    | 9.3                              | 3                                   |
| SA30A                          | 30.00                                    | 33.30                                    | 36.80                                    | 1                          | 48.4                                    | 10.3                             | 3                                   |
| SA33                           | 33.00                                    | 36.70                                    | 44.90                                    | 1                          | 59.0                                    | 8.5                              | 3                                   |
| SA33A                          | 33.00                                    | 36.70                                    | 40.60                                    | 1                          | 53.3                                    | 9.4                              | 3                                   |
| SA36                           | 36.00                                    | 40.00                                    | 48.90                                    | 1                          | 64.3                                    | 7.8                              | 3                                   |
| SA36A                          | 36.00                                    | 40.00                                    | 44.20                                    | 1                          | 58.1                                    | 8.6                              | 3                                   |
| SA40                           | 40.00                                    | 44.40                                    | 54.30                                    | 1                          | 71.4                                    | 7.0                              | 3                                   |
| SA40A                          | 40.00                                    | 44.40                                    | 49.10                                    | 1                          | 64.5                                    | 7.8                              | 3                                   |
| SA43                           | 43.00                                    | 47.80                                    | 58.40                                    | 1                          | 76.6                                    | 6.5                              | 3                                   |
| SA43A                          | 43.00                                    | 47.80                                    | 52.80                                    | 1                          | 69.4                                    | 7.2                              | 3                                   |
| SA45                           | 45.00                                    | 50.00                                    | 61.10                                    | 1                          | 80.3                                    | 6.2                              | 3                                   |
| SA45A                          | 45.00                                    | 50.00                                    | 55.30                                    | 1                          | 72.7                                    | 6.9                              | 3                                   |
| SA48                           | 48.00                                    | 53.30                                    | 65.10                                    | 1                          | 85.5                                    | 5.8                              | 3                                   |
| SA48A                          | 48.00                                    | 53.30                                    | 58.90                                    | 1                          | 77.4                                    | 6.5                              | 3                                   |
| SA51                           | 51.00                                    | 56.70                                    | 69.30                                    | 1                          | 91.1                                    | 5.5                              | 3                                   |
| SA51A                          | 51.00                                    | 56.70                                    | 62.70                                    | 1                          | 82.4                                    | 6.1                              | 3                                   |
| SA54                           | 54.00                                    | 60.00                                    | 73.30                                    | 1                          | 96.3                                    | 5.2                              | 3                                   |
| SA54A                          | 54.00                                    | 60.00                                    | 66.30                                    | 1                          | 87.1                                    | 5.7                              | 3                                   |
| SA58                           | 58.00                                    | 64.40                                    | 78.70                                    | 1                          | 103.0                                   | 4.9                              | 3                                   |
| SA58A                          | 58.00                                    | 64.40                                    | 71.20                                    | 1                          | 93.6                                    | 5.3                              | 3                                   |
| SA60                           | 60.00                                    | 66.70                                    | 81.50                                    | 1                          | 107.0                                   | 4.7                              | 3                                   |
| SA60A                          | 60.00                                    | 66.70                                    | 73.70                                    | 1                          | 96.8                                    | 5.2                              | 3                                   |
| SA64                           | 64.00                                    | 71.10                                    | 86.90                                    | 1                          | 114.0                                   | 4.4                              | 3                                   |
| SA64A                          | 64.00                                    | 71.10                                    | 78.60                                    | 1                          | 103.0                                   | 4.9                              | 3                                   |
| SA70                           | 70.00                                    | 77.80                                    | 95.10                                    | 1                          | 125.0                                   | 4.0                              | 3                                   |
| SA70A                          | 70.00                                    | 77.80                                    | 86.00                                    | 1                          | 113.0                                   | 4.4                              | 3                                   |
| SA75                           | 75.00                                    | 83.30                                    | 102.00                                   | 1                          | 134.0                                   | 3.7                              | 3                                   |
| SA75A                          | 75.00                                    | 83.30                                    | 92.10                                    | 1                          | 121.0                                   | 4.1                              | 3                                   |
| SA78                           | 78.00                                    | 86.70                                    | 106.00                                   | 1                          | 139.0                                   | 3.6                              | 3                                   |
| SA78A                          | 78.00                                    | 86.70                                    | 95.80                                    | 1                          | 126.0                                   | 4.0                              | 3                                   |
| SA85                           | 85.00                                    | 94.40                                    | 115.00                                   | 1                          | 151.0                                   | 3.3                              | 3                                   |
| SA85A                          | 85.00                                    | 94.40                                    | 104.00                                   | 1                          | 137.0                                   | 3.6                              | 3                                   |
| SA90                           | 90.00                                    | 100.00                                   | 122.00                                   | 1                          | 160.0                                   | 3.1                              | 3                                   |
| SA90A                          | 90.00                                    | 100.00                                   | 111.00                                   | 1                          | 146.0                                   | 3.4                              | 3                                   |
| SA100                          | 100.00                                   | 111.00                                   | 136.00                                   | 1                          | 179.0                                   | 2.8                              | 3                                   |
| SA100A                         | 100.00                                   | 111.00                                   | 123.00                                   | 1                          | 162.0                                   | 3.1                              | 3                                   |
| SA110                          | 110.00                                   | 122.00                                   | 149.00                                   | 1                          | 196.0                                   | 2.6                              | 3                                   |
| SA110A                         | 110.00                                   | 122.00                                   | 135.00                                   | 1                          | 177.0                                   | 2.8                              | 3                                   |
| SA120                          | 120.00                                   | 133.00                                   | 163.00                                   | 1                          | 214.0                                   | 2.3                              | 3                                   |
| SA120A                         | 120.00                                   | 133.00                                   | 147.00                                   | 1                          | 193.0                                   | 2.0                              | 3                                   |
| SA130                          | 130.00                                   | 144.00                                   | 176.00                                   | 1                          | 231.0                                   | 2.2                              | 3                                   |
| SA130A                         | 130.00                                   | 144.00                                   | 159.00                                   | 1                          | 209.0                                   | 2.4                              | 3                                   |
| SA150                          | 150.00                                   | 167.00                                   | 204.00                                   | 1                          | 269.0                                   | 1.9                              | 3                                   |
| SA150A                         | 150.00                                   | 167.00                                   | 185.00                                   | 1                          | 243.0                                   | 2.1                              | 3                                   |
| SA160                          | 160.00                                   | 178.00                                   | 218.00                                   | 1                          | 287.0                                   | 1.7                              | 3                                   |
| SA160A                         | 160.00                                   | 178.00                                   | 197.00                                   | 1                          | 259.0                                   | 1.9                              | 3                                   |
| SA170                          | 170.00                                   | 189.00                                   | 231.00                                   | 1                          | 304.0                                   | 1.6                              | 3                                   |
| SA170A                         | 170.00                                   | 189.00                                   | 209.00                                   | 1                          | 275.0                                   | 1.8                              | 3                                   |

## BI-DIRECTIONAL 500 WATT AXIAL LEAD TVS

| BI-DIRECTIONAL<br>PART NUMBER | REVERSE<br>STAND-OFF<br>VOLTAGE VRWM (V) | BREAKDOWN<br>VOLTAGE<br>VBR (V) MIN. @IT | BREAKDOWN<br>VOLTAGE<br>VBR (V) MAX. @IT | TEST<br>CURRENT<br>IT (mA) | MAXIMUM CLAMPING<br>VOLTAGE @Ipp Vc (V) | PEAK PULSE<br>CURRENT<br>Ipp (A) | REVERSE<br>LEAKAGE<br>@VRWM IR (uA) |
|-------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|----------------------------|-----------------------------------------|----------------------------------|-------------------------------------|
| SA5.0C                        | 5.00                                     | 6.40                                     | 7.30                                     | 10                         | 9.6                                     | 52.3                             | 1200                                |
| SA5.0CA                       | 5.00                                     | 6.40                                     | 7.00                                     | 10                         | 9.2                                     | 54.3                             | 1200                                |
| SA6.0C                        | 6.00                                     | 6.67                                     | 8.15                                     | 10                         | 11.4                                    | 43.9                             | 1200                                |
| SA6.0CA                       | 6.00                                     | 6.67                                     | 7.37                                     | 10                         | 10.3                                    | 48.5                             | 1200                                |
| SA6.5C                        | 6.50                                     | 7.22                                     | 8.82                                     | 10                         | 12.3                                    | 40.7                             | 800                                 |
| SA6.5CA                       | 6.50                                     | 7.22                                     | 7.98                                     | 10                         | 11.2                                    | 44.7                             | 800                                 |
| SA7.0C                        | 7.00                                     | 7.78                                     | 9.51                                     | 10                         | 13.3                                    | 37.8                             | 300                                 |
| SA7.0CA                       | 7.00                                     | 7.78                                     | 8.60                                     | 10                         | 12.0                                    | 41.7                             | 300                                 |
| SA7.5C                        | 7.50                                     | 8.33                                     | 10.20                                    | 1                          | 14.3                                    | 35.0                             | 100                                 |
| SA7.5CA                       | 7.50                                     | 8.33                                     | 9.21                                     | 1                          | 12.9                                    | 38.8                             | 100                                 |
| SA8.0C                        | 8.00                                     | 8.99                                     | 10.90                                    | 1                          | 15.0                                    | 33.3                             | 50                                  |
| SA8.0CA                       | 8.00                                     | 8.99                                     | 9.83                                     | 1                          | 13.6                                    | 36.7                             | 50                                  |
| SA8.5C                        | 8.50                                     | 9.44                                     | 11.50                                    | 1                          | 15.9                                    | 31.4                             | 20                                  |
| SA8.5CA                       | 8.50                                     | 9.44                                     | 10.40                                    | 1                          | 14.4                                    | 34.7                             | 20                                  |
| SA9.0C                        | 9.00                                     | 10.00                                    | 12.20                                    | 1                          | 16.9                                    | 29.5                             | 5                                   |
| SA9.0CA                       | 9.00                                     | 10.00                                    | 11.10                                    | 1                          | 15.4                                    | 32.5                             | 5                                   |
| SA10C                         | 10.00                                    | 11.10                                    | 13.60                                    | 1                          | 18.8                                    | 26.6                             | 3                                   |
| SA10CA                        | 10.00                                    | 11.10                                    | 12.30                                    | 1                          | 17.0                                    | 29.4                             | 3                                   |
| SA11C                         | 11.00                                    | 12.20                                    | 14.90                                    | 1                          | 20.1                                    | 24.9                             | 3                                   |
| SA11CA                        | 11.00                                    | 12.20                                    | 13.50                                    | 1                          | 18.2                                    | 27.4                             | 3                                   |
| SA12C                         | 12.00                                    | 13.30                                    | 16.30                                    | 1                          | 22.0                                    | 22.7                             | 3                                   |
| SA12CA                        | 12.00                                    | 13.30                                    | 14.70                                    | 1                          | 19.9                                    | 25.1                             | 3                                   |
| SA13C                         | 13.00                                    | 14.40                                    | 17.60                                    | 1                          | 23.8                                    | 21.0                             | 3                                   |
| SA13CA                        | 13.00                                    | 14.40                                    | 15.90                                    | 1                          | 21.5                                    | 23.2                             | 3                                   |
| SA14C                         | 14.00                                    | 15.60                                    | 19.10                                    | 1                          | 25.8                                    | 19.4                             | 3                                   |
| SA14CA                        | 14.00                                    | 15.60                                    | 17.20                                    | 1                          | 23.2                                    | 21.5                             | 3                                   |
| SA15C                         | 15.00                                    | 16.70                                    | 20.40                                    | 1                          | 26.9                                    | 18.8                             | 3                                   |
| SA15CA                        | 15.00                                    | 16.70                                    | 18.50                                    | 1                          | 24.4                                    | 20.6                             | 3                                   |
| SA16C                         | 16.00                                    | 17.80                                    | 21.80                                    | 1                          | 28.8                                    | 17.6                             | 3                                   |
| SA16CA                        | 16.00                                    | 17.80                                    | 19.70                                    | 1                          | 26.0                                    | 19.2                             | 3                                   |
| SA17C                         | 17.00                                    | 18.90                                    | 23.10                                    | 1                          | 30.5                                    | 16.4                             | 3                                   |
| SA17CA                        | 17.00                                    | 18.90                                    | 20.90                                    | 1                          | 27.6                                    | 16.1                             | 3                                   |
| SA18C                         | 18.00                                    | 20.00                                    | 24.40                                    | 1                          | 32.2                                    | 15.5                             | 3                                   |
| SA18CA                        | 18.00                                    | 20.00                                    | 22.10                                    | 1                          | 29.2                                    | 17.2                             | 3                                   |
| SA20C                         | 20.00                                    | 22.20                                    | 27.10                                    | 1                          | 35.8                                    | 13.9                             | 3                                   |
| SA20CA                        | 20.00                                    | 22.20                                    | 24.50                                    | 1                          | 32.4                                    | 15.4                             | 3                                   |
| SA22C                         | 22.00                                    | 24.40                                    | 29.80                                    | 1                          | 39.4                                    | 12.7                             | 3                                   |
| SA22CA                        | 22.00                                    | 24.40                                    | 26.90                                    | 1                          | 35.5                                    | 14.1                             | 3                                   |
| SA24C                         | 24.00                                    | 26.70                                    | 32.60                                    | 1                          | 43.0                                    | 11.6                             | 3                                   |
| SA24CA                        | 24.00                                    | 26.70                                    | 29.50                                    | 1                          | 38.9                                    | 12.8                             | 3                                   |
| SA26C                         | 26.00                                    | 28.90                                    | 35.30                                    | 1                          | 46.6                                    | 10.7                             | 3                                   |
| SA26CA                        | 26.00                                    | 28.90                                    | 31.90                                    | 1                          | 42.1                                    | 11.9                             | 3                                   |
| SA28C                         | 28.00                                    | 31.10                                    | 38.00                                    | 1                          | 50.0                                    | 9.9                              | 3                                   |
| SA28CA                        | 28.00                                    | 31.10                                    | 34.40                                    | 1                          | 45.4                                    | 11.0                             | 3                                   |
| SA30C                         | 30.00                                    | 33.30                                    | 40.70                                    | 1                          | 53.5                                    | 9.3                              | 3                                   |
| SA30CA                        | 30.00                                    | 33.30                                    | 36.80                                    | 1                          | 48.4                                    | 10.3                             | 3                                   |
| SA33C                         | 33.00                                    | 36.70                                    | 44.90                                    | 1                          | 59.0                                    | 8.5                              | 3                                   |
| SA33CA                        | 33.00                                    | 36.70                                    | 40.60                                    | 1                          | 53.3                                    | 9.4                              | 3                                   |
| SA36C                         | 36.00                                    | 40.00                                    | 48.90                                    | 1                          | 64.3                                    | 7.8                              | 3                                   |
| SA36CA                        | 36.00                                    | 40.00                                    | 44.20                                    | 1                          | 58.1                                    | 8.6                              | 3                                   |
| SA40C                         | 40.00                                    | 44.40                                    | 54.30                                    | 1                          | 71.4                                    | 7.0                              | 3                                   |
| SA40CA                        | 40.00                                    | 44.40                                    | 49.10                                    | 1                          | 64.5                                    | 7.8                              | 3                                   |
| SA43C                         | 43.00                                    | 47.80                                    | 58.40                                    | 1                          | 76.6                                    | 6.5                              | 3                                   |
| SA43CA                        | 43.00                                    | 47.80                                    | 52.80                                    | 1                          | 69.4                                    | 7.2                              | 3                                   |
| SA45C                         | 45.00                                    | 50.00                                    | 61.10                                    | 1                          | 80.3                                    | 6.2                              | 3                                   |
| SA45CA                        | 45.00                                    | 50.00                                    | 55.30                                    | 1                          | 72.7                                    | 6.9                              | 3                                   |
| SA48C                         | 48.00                                    | 53.30                                    | 65.10                                    | 1                          | 85.5                                    | 5.8                              | 3                                   |
| SA48CA                        | 48.00                                    | 53.30                                    | 58.90                                    | 1                          | 77.4                                    | 6.5                              | 3                                   |
| SA51C                         | 51.00                                    | 56.70                                    | 69.30                                    | 1                          | 91.1                                    | 5.5                              | 3                                   |
| SA51CA                        | 51.00                                    | 56.70                                    | 62.70                                    | 1                          | 82.4                                    | 6.1                              | 3                                   |
| SA54C                         | 54.00                                    | 60.00                                    | 73.30                                    | 1                          | 96.3                                    | 5.2                              | 3                                   |
| SA54CA                        | 54.00                                    | 60.00                                    | 66.30                                    | 1                          | 87.1                                    | 5.7                              | 3                                   |
| SA58C                         | 58.00                                    | 64.40                                    | 78.70                                    | 1                          | 103.0                                   | 4.9                              | 3                                   |
| SA58CA                        | 58.00                                    | 64.40                                    | 71.20                                    | 1                          | 93.6                                    | 5.3                              | 3                                   |
| SA60C                         | 60.00                                    | 66.70                                    | 81.50                                    | 1                          | 107.0                                   | 4.7                              | 3                                   |
| SA60CA                        | 60.00                                    | 66.70                                    | 73.70                                    | 1                          | 96.8                                    | 5.2                              | 3                                   |
| SA64C                         | 64.00                                    | 71.10                                    | 86.90                                    | 1                          | 114.0                                   | 4.4                              | 3                                   |
| SA64CA                        | 64.00                                    | 71.10                                    | 78.60                                    | 1                          | 103.0                                   | 4.9                              | 3                                   |
| SA70C                         | 70.00                                    | 77.80                                    | 95.10                                    | 1                          | 125.0                                   | 4.0                              | 3                                   |
| SA70CA                        | 70.00                                    | 77.80                                    | 86.00                                    | 1                          | 113.0                                   | 4.4                              | 3                                   |
| SA75C                         | 75.00                                    | 83.30                                    | 102.00                                   | 1                          | 134.0                                   | 3.7                              | 3                                   |
| SA75CA                        | 75.00                                    | 83.30                                    | 92.10                                    | 1                          | 121.0                                   | 4.1                              | 3                                   |
| SA78C                         | 78.00                                    | 86.70                                    | 106.00                                   | 1                          | 139.0                                   | 3.6                              | 3                                   |
| SA78CA                        | 78.00                                    | 86.70                                    | 95.80                                    | 1                          | 126.0                                   | 4.0                              | 3                                   |
| SA85C                         | 85.00                                    | 94.40                                    | 115.00                                   | 1                          | 151.0                                   | 3.3                              | 3                                   |
| SA85CA                        | 85.00                                    | 94.40                                    | 104.00                                   | 1                          | 137.0                                   | 3.6                              | 3                                   |
| SA90C                         | 90.00                                    | 100.00                                   | 122.00                                   | 1                          | 160.0                                   | 3.1                              | 3                                   |
| SA90CA                        | 90.00                                    | 100.00                                   | 111.00                                   | 1                          | 146.0                                   | 3.4                              | 3                                   |
| SA100C                        | 100.00                                   | 111.00                                   | 136.00                                   | 1                          | 179.0                                   | 2.8                              | 3                                   |
| SA100CA                       | 100.00                                   | 111.00                                   | 123.00                                   | 1                          | 162.0                                   | 3.1                              | 3                                   |
| SA110C                        | 110.00                                   | 122.00                                   | 149.00                                   | 1                          | 196.0                                   | 2.6                              | 3                                   |
| SA110CA                       | 110.00                                   | 122.00                                   | 135.00                                   | 1                          | 177.0                                   | 2.8                              | 3                                   |
| SA120C                        | 120.00                                   | 133.00                                   | 163.00                                   | 1                          | 214.0                                   | 2.3                              | 3                                   |
| SA120CA                       | 120.00                                   | 133.00                                   | 147.00                                   | 1                          | 193.0                                   | 2.0                              | 3                                   |
| SA130C                        | 130.00                                   | 144.00                                   | 176.00                                   | 1                          | 231.0                                   | 2.2                              | 3                                   |
| SA130CA                       | 130.00                                   | 144.00                                   | 159.00                                   | 1                          | 209.0                                   | 2.4                              | 3                                   |
| SA150C                        | 150.00                                   | 167.00                                   | 204.00                                   | 1                          | 269.0                                   | 1.9                              | 3                                   |
| SA150CA                       | 150.00                                   | 167.00                                   | 185.00                                   | 1                          | 243.0                                   | 2.1                              | 3                                   |
| SA160C                        | 160.00                                   | 178.00                                   | 218.00                                   | 1                          | 287.0                                   | 1.7                              | 3                                   |
| SA160CA                       | 160.00                                   | 178.00                                   | 197.00                                   | 1                          | 259.0                                   | 1.9                              | 3                                   |
| SA170C                        | 170.00                                   | 189.00                                   | 231.00                                   | 1                          | 304.0                                   | 1.6                              | 3                                   |
| SA170CA                       | 170.00                                   | 189.00                                   | 209.00                                   | 1                          | 275.0                                   | 1.8                              | 3                                   |

## ORDERING INFORMATION

| Product No.♦     | Package Type | Shipping Quantity |
|------------------|--------------|-------------------|
| SAxx-T3          | DO-15        | 4000/Tape & Reel  |
| <b>SAxx-TB</b>   | DO-15        | 3000/Tape & Box   |
| SAxx             | DO-15        | 1000 Units/Box    |
| SAxxA-T3         | DO-15        | 4000/Tape & Reel  |
| <b>SAxxA-TB</b>  | DO-15        | 3000/Tape & Box   |
| SAxxA            | DO-15        | 1000 Units/Box    |
| SAxxC-T3         | DO-15        | 4000/Tape & Reel  |
| <b>SAxxC-TB</b>  | DO-15        | 3000/Tape & Box   |
| SAxxC            | DO-15        | 1000 Units/Box    |
| SAxxCA-T3        | DO-15        | 4000/Tape & Reel  |
| <b>SAxxCA-TB</b> | DO-15        | 3000/Tape & Box   |
| SAxxCA           | DO-15        | 1000 Units/Box    |

Products listed in **bold** are WTE **Preferred** devices.

♦T3 suffix refers to a 13" reel. TB suffix refers to Ammo Pack.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

### Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

**Fax:** 886-7-822-5417

**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

*We power your everyday.*