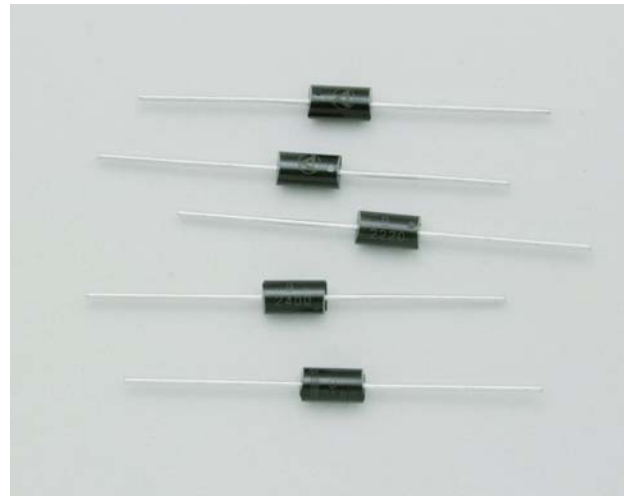
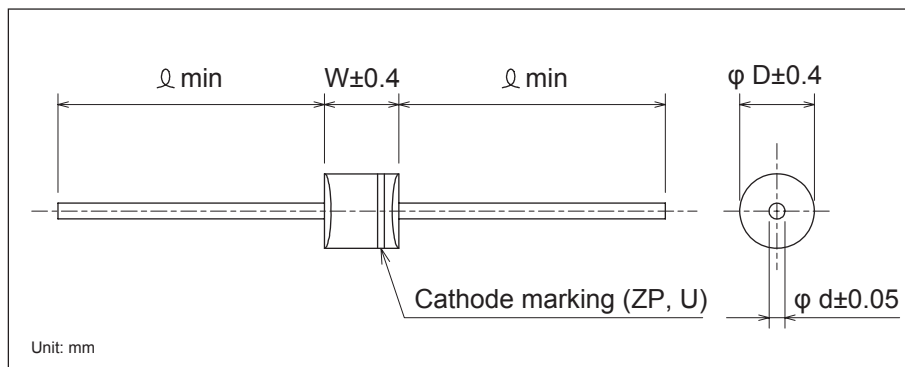


The Silicon Surge Absorber is available in five series that support the countermeasure against a wide range of surge from low to high, including electrostatic discharges and lightning surges. The device may also be used as a constant voltage device where high voltage or high power is required.



| Series | Unidirectional | Dual-directional | Maximum permissible power |                |
|--------|----------------|------------------|---------------------------|----------------|
|        |                |                  | 8/20 $\mu$ s              | 10/100 $\mu$ s |
| 1000   | ZP             | CP               | 6,000 W                   | 500 W          |
| 1500   | ZP             | CP               | 15,000W                   | 1,300W         |
| 2000   | U              | B                | 18,000W                   | 1,500W         |
| 3000   | U              | B                | 34,000W                   | 3,500W         |
| 5000   | U              | B                | 44,000W                   | 5000W          |

#### • Dimensions



| Dimensions (mm) |     |      |     |               |
|-----------------|-----|------|-----|---------------|
| Series          | D   | W    | d   | $\varnothing$ |
| 1000            | 2.8 | 5.0  | 0.6 | 20            |
| 1500            | 5.3 | 9.7  | 1.0 |               |
| 2000            |     |      |     |               |
| 3000            | 8.5 | 8.6  |     |               |
| 5000            | 9.7 | 12.3 | 1.2 |               |

### Electrical Specifications

#### 1000 Series

Maximum peak pulse power 6,000W (8/20 $\mu$ sec)

| Model Number* <sup>1</sup> | Breakdown Voltage   |                     | Standoff Voltage    |                           | Surge Waveform 8/20 $\mu$ sec |                    |
|----------------------------|---------------------|---------------------|---------------------|---------------------------|-------------------------------|--------------------|
|                            | V <sub>BR</sub> (V) | I <sub>T</sub> (mA) | V <sub>WM</sub> (V) | I <sub>R</sub> ( $\mu$ A) | I <sub>PPM</sub> (A)          | V <sub>C</sub> (V) |
| □□1007                     | 7.5                 | 1                   | 6.05                | 200                       | 419                           | 14.3               |
| ZP1010                     | 10                  |                     | 8.10                | 10                        | 311                           | 19.5               |
| □□1012                     | 12                  |                     | 9.72                | 5                         | 267                           | 22.7               |
| □□1016                     | 16                  |                     | 12.9                |                           | 213                           | 28.4               |
| □□1018                     | 18                  |                     | 14.5                |                           | 178                           | 34.0               |
| ZP1027                     | 27                  |                     | 21.8                |                           | 120                           | 50.5               |
| ZP1040                     | 40                  |                     | 32.4                |                           | 83                            | 73.0               |
| □□1050* <sup>2</sup>       | 50                  |                     | 40.5                |                           | 68.9                          | 88.0               |
| ZP1060                     | 60                  |                     | 48.6                |                           | 52.6                          | 114                |
| ZP1075* <sup>2</sup>       | 75                  |                     | 60.7                |                           | 42.2                          | 142                |
| ZP1120                     | 120                 |                     | 97.0                |                           | 27.3                          | 222                |

\*<sup>1</sup> ZP: Unidirectional, CP: Dual-directional, □□: Both ZP and CP

\*<sup>2</sup> Requirements may vary depending on the quantity orderd. Please ask for details.

#### 1500 Series

Maximum peak pulse power 15,000W (8/20 $\mu$ sec)

| Model Number* | Breakdown Voltage   |                     | Standoff Voltage    |                           | Surge Waveform 8/20 $\mu$ sec |                    |
|---------------|---------------------|---------------------|---------------------|---------------------------|-------------------------------|--------------------|
|               | V <sub>BR</sub> (V) | I <sub>T</sub> (mA) | V <sub>WM</sub> (V) | I <sub>R</sub> ( $\mu$ A) | I <sub>PPM</sub> (A)          | V <sub>C</sub> (V) |
| □□1.5K007     | 7.5                 | 10                  | 6.05                | 1,000                     | 1034                          | 14.5               |
| □□1.5K018     | 18                  | 1                   | 14.5                | 5                         | 462                           | 32.5               |
| □□1.5K022     | 22                  |                     | 17.8                |                           | 382                           | 39.3               |
| □□1.5K033     | 33                  |                     | 26.8                |                           | 253                           | 59.0               |
| □□1.5K047     | 47                  |                     | 38.1                |                           | 178                           | 84.0               |

\* ZP: Unidirectional, CP: Dual-directional, □□: Both ZP and CP



## 2000 Series

Maximum peak pulse power 18,000W (8/20μsec)

| Model Number* | Breakdown Voltage   |                     | Standoff Voltage    |                     | Surge Waveform 8/20μsec |                    |
|---------------|---------------------|---------------------|---------------------|---------------------|-------------------------|--------------------|
|               | V <sub>BR</sub> (V) | I <sub>T</sub> (mA) | V <sub>WM</sub> (V) | I <sub>R</sub> (μA) | I <sub>PPM</sub> (A)    | V <sub>C</sub> (V) |
| U2006         | 6.8                 | 10                  | 5.50                | 2,000               | 1343.0                  | 13.4               |
| B2007         | 7.5                 |                     | 6.05                | 1,000               | 1241.0                  | 14.5               |
| B2008         | 8.2                 |                     | 6.63                | 400                 | 1161.0                  | 15.5               |
| B2010         | 10.0                | 1                   | 8.10                | 20                  | 968.0                   | 18.6               |
| B2012         | 12.0                |                     | 9.72                | 5                   | 829.0                   | 21.7               |
| □2018         | 18.0                |                     | 14.50               |                     | 554.0                   | 32.5               |
| □2022         | 22.0                |                     | 17.80               |                     | 458.0                   | 39.3               |
| B2027         | 27.0                |                     | 21.80               |                     | 373.0                   | 48.3               |
| □2033         | 33.0                |                     | 26.80               |                     | 305.0                   | 59.0               |
| □2039         | 39.0                |                     | 31.60               |                     | 258.0                   | 69.7               |
| □2047         | 47.0                |                     | 38.10               |                     | 214.0                   | 84.0               |
| B2056         | 56.0                |                     | 45.50               |                     | 180.0                   | 100.0              |
| B2068         | 68.0                |                     | 55.10               |                     | 148.0                   | 121.0              |
| B2082         | 82.0                |                     | 66.40               |                     | 123.0                   | 146.0              |
| B2100         | 100.0               |                     | 81.00               |                     | 101.0                   | 178.0              |
| B2150         | 150.0               |                     | 121.00              |                     | 68.0                    | 265.0              |
| □2180         | 180.0               |                     | 146.00              |                     | 57.0                    | 317.0              |
| B2220         | 220.0               |                     | 175.00              |                     | 46.5                    | 388.0              |
| B2250         | 250.0               |                     | 202.00              |                     | 40.7                    | 442.0              |
| B2300         | 300.0               |                     | 243.00              |                     | 34.0                    | 529.0              |
| B2400         | 400.0               |                     | 324.00              |                     | 25.5                    | 706.0              |

\* U: Unidirectional, B: Dual-directional, □: Both U and B

## 3000 Series

Maximum peak pulse power 34,000W (8/20μsec)

| Model Number* | Breakdown Voltage   |                     | Standoff Voltage    |                     | Surge Waveform 8/20μsec |                    |
|---------------|---------------------|---------------------|---------------------|---------------------|-------------------------|--------------------|
|               | V <sub>BR</sub> (V) | I <sub>T</sub> (mA) | V <sub>WM</sub> (V) | I <sub>R</sub> (μA) | I <sub>PPM</sub> (A)    | V <sub>C</sub> (V) |
| B3007         | 7.5                 | 10                  | 6.05                | 2,000               | 2313.0                  | 14.7               |
| B3008         | 8.2                 |                     | 6.63                |                     | 2208.0                  | 15.4               |
| B3010         | 10.0                | 1                   | 8.10                | 100                 | 1717.0                  | 19.8               |
| □3015         | 15.0                |                     | 12.10               | 10                  | 1145.0                  | 29.7               |
| □3018         | 18.0                |                     | 14.50               |                     | 955.0                   | 35.6               |
| U3022         | 22.0                |                     | 17.80               |                     | 780.0                   | 43.6               |
| □3033         | 33.0                |                     | 26.80               |                     | 521.0                   | 63.5               |
| B3036         | 36.0                |                     | 29.16               |                     | 478.0                   | 71.0               |
| U3039         | 39.0                |                     | 31.60               |                     | 440.0                   | 77.2               |
| B3056         | 56.0                |                     | 45.50               |                     | 307.0                   | 111.0              |
| □3068         | 68.0                |                     | 55.10               |                     | 252.0                   | 135.0              |
| B3082         | 82.0                |                     | 66.40               |                     | 210.0                   | 162.0              |
| U3180         | 180.0               |                     | 146.00              |                     | 96.0                    | 356.0              |

\* U: Unidirectional, B: Dual-directional, □: Both U and B

## 5000 Series

Maximum peak pulse power 44,000W (8/20μsec)

| Model Number* | Breakdown Voltage   |                     | Standoff Voltage    |                     | Surge Waveform 8/20μsec |                    |
|---------------|---------------------|---------------------|---------------------|---------------------|-------------------------|--------------------|
|               | V <sub>BR</sub> (V) | I <sub>T</sub> (mA) | V <sub>WM</sub> (V) | I <sub>R</sub> (μA) | I <sub>PPM</sub> (A)    | V <sub>C</sub> (V) |
| B5007         | 7.5                 | 10                  | 6.05                | 2,000               | 2963.0                  | 15.1               |
| B5008         | 8.2                 |                     | 6.63                |                     | 2819.0                  | 15.9               |
| B5010         | 10.0                | 1                   | 8.10                | 100                 | 2426.0                  | 18.5               |
| □5015         | 15.0                |                     | 12.10               | 10                  | 1621.0                  | 27.6               |
| □5018         | 18.0                |                     | 14.50               |                     | 1352.0                  | 33.1               |
| U5022         | 22.0                |                     | 17.80               |                     | 1104.0                  | 40.5               |
| □5033         | 33.0                |                     | 26.80               |                     | 737.0                   | 60.7               |
| B5036         | 36.0                |                     | 29.16               |                     | 679.0                   | 64.8               |
| U5039         | 39.0                |                     | 31.60               |                     | 622.0                   | 71.9               |
| B5056         | 56.0                |                     | 45.50               |                     | 434.0                   | 103.0              |
| □5068         | 68.0                |                     | 55.10               |                     | 358.0                   | 126.0              |
| B5082         | 82.0                |                     | 66.40               |                     | 298.0                   | 150.0              |
| U5180         | 180.0               |                     | 146.00              |                     | 135.0                   | 331.0              |

\* U: Unidirectional, B: Dual-directional, □: Both U and B