

### Surface Mount TVS Diode Array for ESD Protection

**(Pb)** Lead(Pb)-Free

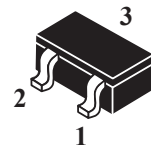
#### Features:

- \* Transient Protection for data lines as per IEC 61000-4-2(ESD)15KV(air), 8KV(contact)
- \* 300 Watts Peak Power Protection. (tp=8/20μS)
- \* Protects Two Unidirectional Lines with pin3 used as a common anode Connection or One Bidirectional Line between pin1 & pin2
- \* Low Leakage Current
- \* Excellent Clamping Capability
- \* Transient Voltage Suppressors Encapsulated in a SC-59 Package

#### Mechanical Data:

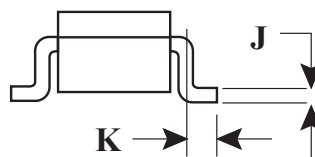
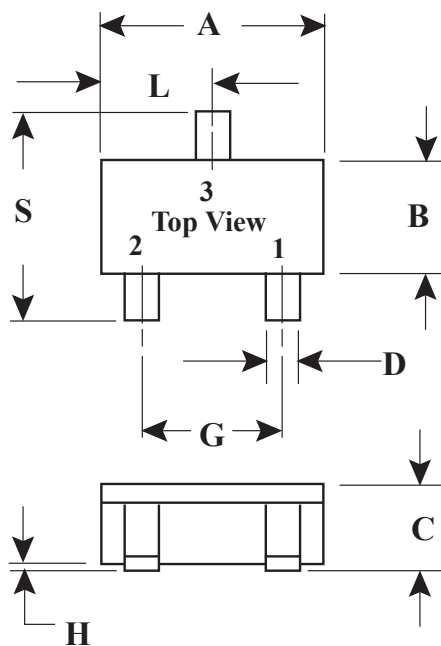
- \* Case : Molded Epoxy
- \* Marking : Marking Code
- \* Weight : 0.008 grams(approx)

**TRANSIENT  
VOLTAGE  
SUPPRESSORS  
300 WATTS  
3-36 VOLTS**



**SC-59**

### SC-59 Outline Dimension



| SC-59               |      |      |
|---------------------|------|------|
| Dim                 | Min  | Max  |
| A                   | 2.70 | 3.10 |
| B                   | 1.30 | 1.70 |
| C                   | 1.00 | 1.30 |
| D                   | 0.35 | 0.50 |
| G                   | 1.70 | 2.30 |
| H                   | 0.00 | 0.10 |
| J                   | 0.10 | 0.26 |
| K                   | 0.20 | 0.60 |
| L                   | 1.25 | 1.65 |
| S                   | 2.25 | 3.00 |
| All Dimension in mm |      |      |

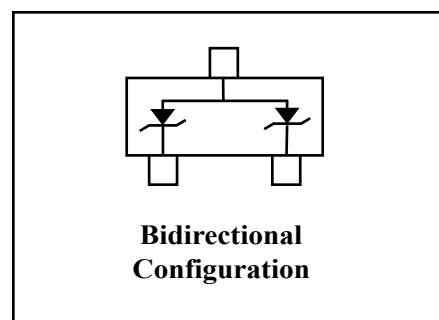
**Maximum Ratings( $T_A=25^{\circ}\text{C}$  Unless Otherwise Noted)**

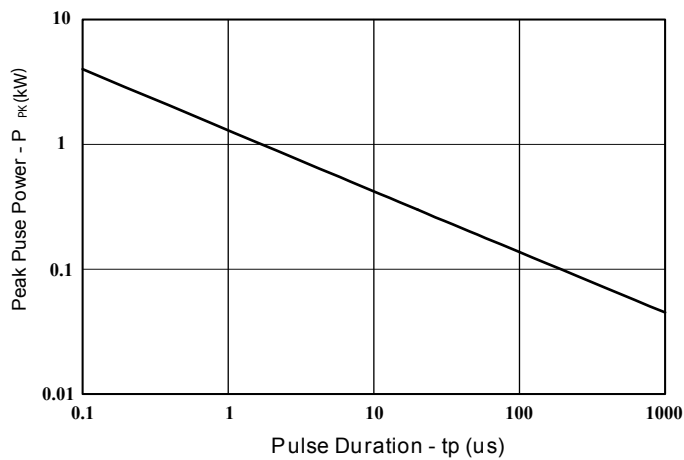
| Characteristic   | Symbol          | Vote        | Unit                        |
|--|-----------------|-------------|-----------------------------|
| Peak Pulse Power Dissipation ( $t_p = 8/20\mu\text{s}$ ) | $P_{PK}$        | 300         | W                           |
| Thermal Resistance, Junction to Ambient                  | $R_{\theta JA}$ | 556         | $^{\circ}\text{C}/\text{W}$ |
| Lead Soldering Temperature                               | $T_L$           | 260(10s)    | $^{\circ}\text{C}$          |
| Operating Temperature Range                              | $T_J$           | -55 to +125 | $^{\circ}\text{C}$          |
| Storage Temperature Range                                | $T_{stg}$       | -55 to +150 | $^{\circ}\text{C}$          |

**Electrical Characteristics( $T_A=25^{\circ}\text{C}$  Unless Otherwise Noted)**

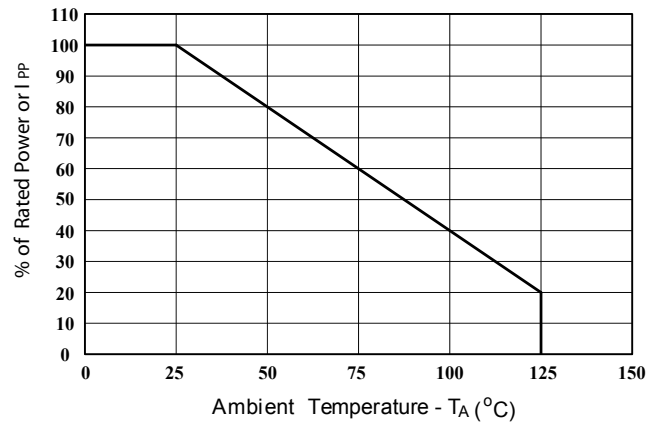
| Part Number    | Marking Code | Reverse Stand off Voltage | Breakdown Voltage $V_{BR}@1\text{mA}$ | Max Clamping Voltage @1A | Max Clamping Voltage @5A | Max Reverse Leakage @VRWM | Capacitance @ $\partial V, 1\text{MHz}$ PIN 1-3 or PIN 2-3 |
|----------------|--------------|---------------------------|---------------------------------------|--------------------------|--------------------------|---------------------------|--|
|                |              | VRWM(V)                   | MIN(V)                                | Vc(V)                    | Vc(V)                    | $I_R(\mu\text{A})$        | (PF)   |
| <b>WOST03C</b> | M03          | 3.3                       | 4-5                                   | 7.0                      | 8.5                      | 100                       | 700  |
| <b>WOST05C</b> | M05          | 5.0                       | 6.1-7.4                               | 9.8                      | 11                       | 12                        | 420  |
| <b>WOST12C</b> | M12          | 12.0                      | 13.3-16.3                             | 19.0                     | 24                       | 0.5                       | 150  |
| <b>WOST15C</b> | M15          | 15.0                      | 16.7-20.4                             | 24.0                     | 30                       | 0.5                       | 100  |
| <b>WOST24C</b> | M24          | 24.0                      | 26.7-32.6                             | 43.0                     | 55                       | 0.5                       | 60   |
| <b>WOST36C</b> | M36          | 36.0                      | 40.0-47.0                             | 60.0                     | 75                       | 0.5                       | 60   |

**NOTE:1. Suffix "C" denotes Bi-directional device.**

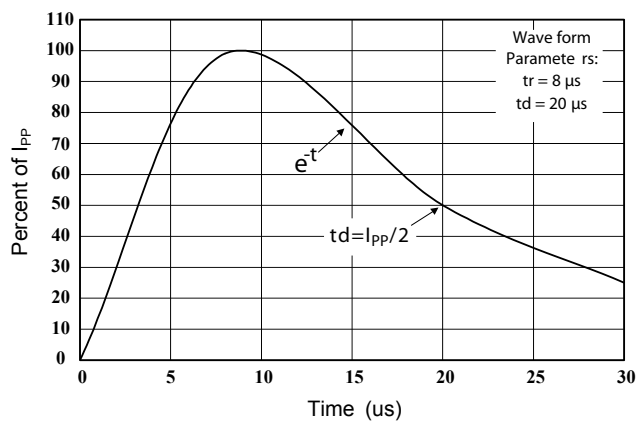
**Equivalent Circuit Diagram:**




**FIG.1 Non-Repetitive Peak Pulse Power vs. Pulse Time**



**FIG.2 Power Derating Curve**



**FIG.3 Pulse Waveform**