

# 1.5KE SERIES

## GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR

VOLTAGE - 6.8 TO 440 Volts

1500 Watt Peak Power

5.0 Watt Steady State

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass passivated chip junction in Molded Plastic package
- 1500W surge capability at 1ms
- Excellent clamping capability
- Low zener impedance
- Fast response time: typically less than 1.0 ps from 0 volts to BV min
- Typical  $I_R$  less than 1  $\mu$ A above 10V
- High temperature soldering guaranteed: 260  $^{\circ}$ C/10 seconds/.375", (9.5mm) lead length/5lbs., (2.3kg) tension

### MECHANICAL DATA

Case: JEDEC DO-201AE molded plastic

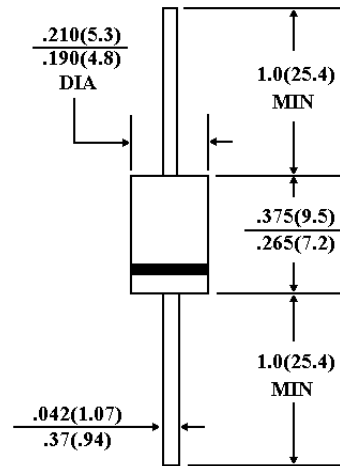
Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denoted cathode except Bipolar

Mounting Position: Any

Weight: 0.045 ounce, 1.2 grams

### DO-201AE



Dimensions in inches and (millimeters)

### DEVICES FOR BIPOLAR APPLICATIONS

For Bidirectional use C or CA Suffix for types 1.5KE6.8 thru types 1.5KE440.  
Electrical characteristics apply in both directions.

### MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25  $^{\circ}$ C ambient temperature unless otherwise specified.

| RATING                                                                                                    | SYMBOL         | VALUE        | UNITS              |
|-----------------------------------------------------------------------------------------------------------|----------------|--------------|--------------------|
| Peak Power Dissipation at $T_A=25^{\circ}\text{C}$ , $T_P=1\text{ms}$ (Note 1)                            | $P_{PK}$       | Minimum 1500 | Watts              |
| Steady State Power Dissipation at $T_L=75^{\circ}\text{C}$ Lead Lengths .375", (9.5mm) (Note 2)           | PD             | 5.0          | Watts              |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JECED Method) (Note 3) | $I_{FSM}$      | 200          | Amps               |
| Operating and Storage Temperature Range                                                                   | $T_J, T_{STG}$ | -65 to +175  | $^{\circ}\text{C}$ |

#### NOTES:

- 1.Non-repetitive current pulse, per Fig. 3 and derated above  $T_A=25^{\circ}\text{C}$  per Fig. 2.
- 2.Mounted on Copper Leaf area of 0.79in<sup>2</sup>(20mm<sup>2</sup>).
- 3.8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

## RATING AND CHARACTERISTIC CURVES 1.5KE SERIES

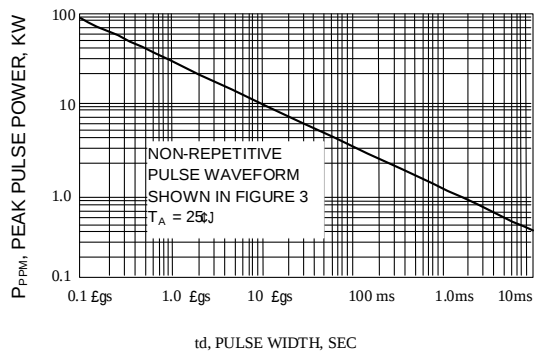


Fig. 1-PEAK PULSE POWER RATING CURVE

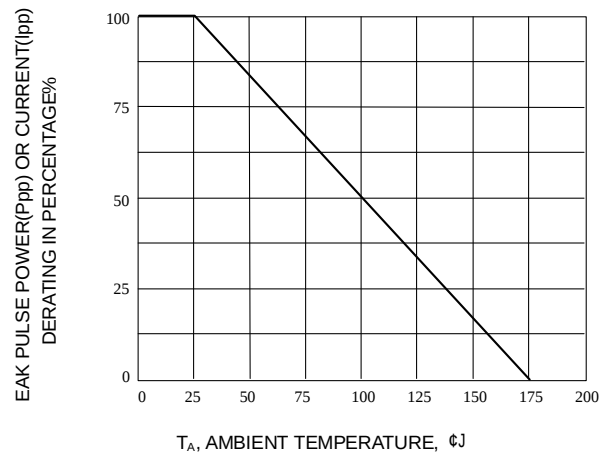


Fig. 2-PULSE DERATING CURVE

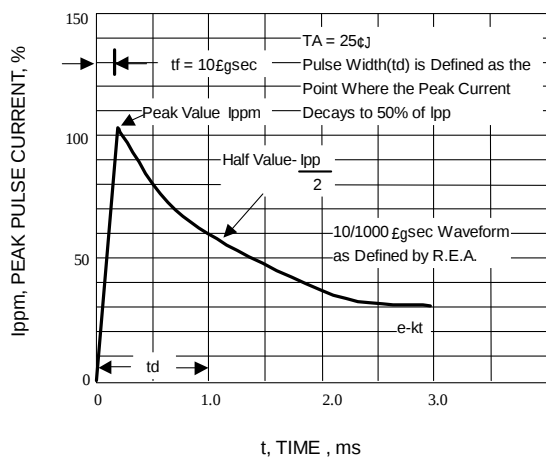


Fig. 3-PULSE WAVEFORM

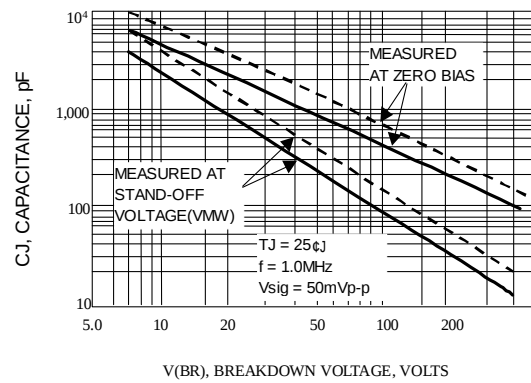


Fig. 4-TYPICAL JUNCTION CAPACITANCE UNIDIRECTIONAL

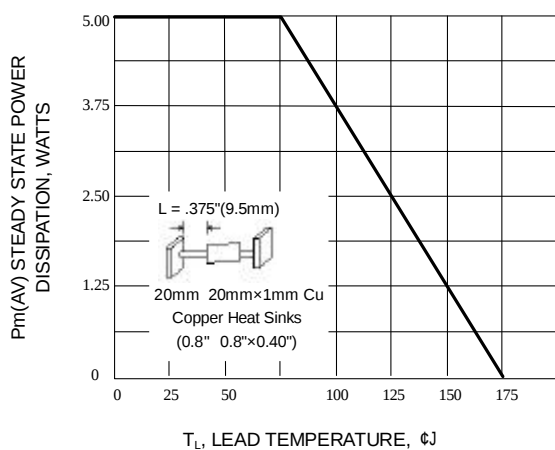


Fig. 5-STEADY STATE POWER DERATING CURVE

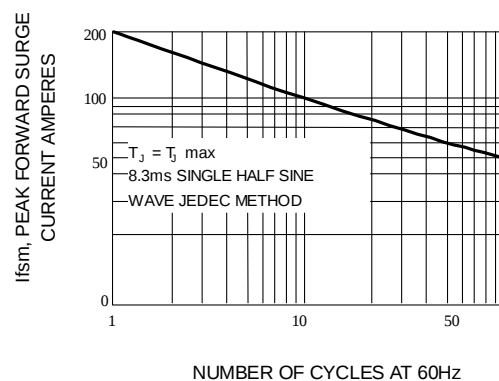


Fig. 6-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT UNIDIRECTIONAL

**UNI-DIRECTIONAL 1500 Watt Axial Lead TVS**

| UNI-DIRECTIONAL<br>PART<br>NUMBER | JEDEC<br>PART<br>NUMBER | REVERSE<br>STAND-OFF<br>VOLTAGE<br>VRWM (V) | BREAKDOWN<br>VOLTAGE<br>VBR (V)<br>MIN. @IT | BREAKDOWN<br>VOLTAGE<br>VBR (V)<br>MAX. @IT | TEST<br>CURRENT<br>IT<br>(mA) | MAXIMUM<br>CLAMPING<br>VOLTAGE<br>@IPP VC (V) | PEAK<br>PULSE<br>CURRENT<br>IPP (A) | REVERSE<br>LEAKAGE<br>@VRWM<br>IR (uA) |
|-----------------------------------|-------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|-------------------------------|-----------------------------------------------|-------------------------------------|----------------------------------------|
| 1.5KE6.8                          | 1N6267                  | 5.50                                        | 6.12                                        | 7.48                                        | 10                            | 10.8                                          | 139.0                               | 1000.0                                 |
| 1.5KE6.8A                         | 1N6267A                 | 5.80                                        | 6.45                                        | 7.14                                        | 10                            | 10.5                                          | 143.0                               | 1000.0                                 |
| 1.5KE7.5                          | 1N6268                  | 6.05                                        | 6.75                                        | 8.25                                        | 10                            | 11.7                                          | 128.0                               | 500.0                                  |
| 1.5KE7.5A                         | 1N6268A                 | 6.40                                        | 7.13                                        | 7.88                                        | 10                            | 11.3                                          | 132.0                               | 500.0                                  |
| 1.5KE8.2                          | 1N6269                  | 6.63                                        | 7.38                                        | 9.02                                        | 10                            | 12.5                                          | 120.0                               | 200.0                                  |
| 1.5KE8.2A                         | 1N6269A                 | 7.02                                        | 7.79                                        | 8.61                                        | 10                            | 12.1                                          | 124.0                               | 200.0                                  |
| 1.5KE9.1                          | 1N6270                  | 7.37                                        | 8.19                                        | 10.00                                       | 1                             | 13.8                                          | 109.0                               | 50.0                                   |
| 1.5KE9.1A                         | 1N6270A                 | 7.78                                        | 8.65                                        | 9.50                                        | 1                             | 13.4                                          | 112.0                               | 50.0                                   |
| 1.5KE10                           | 1N6271                  | 8.10                                        | 9.00                                        | 11.00                                       | 1                             | 15.0                                          | 100.0                               | 10.0                                   |
| 1.5KE10A                          | 1N6271A                 | 8.55                                        | 9.50                                        | 10.50                                       | 1                             | 14.5                                          | 103.0                               | 10.0                                   |
| 1.5KE11                           | 1N6272                  | 8.92                                        | 9.90                                        | 12.10                                       | 1                             | 16.2                                          | 93.0                                | 5.0                                    |
| 1.5KE11A                          | 1N6272A                 | 9.40                                        | 10.50                                       | 11.60                                       | 1                             | 15.6                                          | 96.0                                | 5.0                                    |
| 1.5KE12                           | 1N6273                  | 9.72                                        | 10.80                                       | 13.20                                       | 1                             | 17.3                                          | 87.0                                | 5.0                                    |
| 1.5KE12A                          | 1N6273A                 | 10.20                                       | 11.40                                       | 12.60                                       | 1                             | 16.7                                          | 90.0                                | 5.0                                    |
| 1.5KE13                           | 1N6274                  | 10.50                                       | 11.70                                       | 14.30                                       | 1                             | 19.0                                          | 79.0                                | 5.0                                    |
| 1.5KE13A                          | 1N6274A                 | 11.10                                       | 12.40                                       | 13.70                                       | 1                             | 18.2                                          | 82.0                                | 5.0                                    |
| 1.5KE15                           | 1N6275                  | 12.10                                       | 13.50                                       | 16.50                                       | 1                             | 22.0                                          | 68.0                                | 5.0                                    |
| 1.5KE15A                          | 1N6275A                 | 12.80                                       | 14.30                                       | 15.80                                       | 1                             | 21.2                                          | 71.0                                | 5.0                                    |
| 1.5KE16                           | 1N6276                  | 12.90                                       | 14.40                                       | 17.60                                       | 1                             | 23.5                                          | 64.0                                | 5.0                                    |
| 1.5KE16A                          | 1N6276A                 | 13.60                                       | 15.20                                       | 16.80                                       | 1                             | 22.5                                          | 67.0                                | 5.0                                    |
| 1.5KE18                           | 1N6277                  | 14.50                                       | 16.20                                       | 19.80                                       | 1                             | 26.5                                          | 56.5                                | 5.0                                    |
| 1.5KE18A                          | 1N6277A                 | 15.30                                       | 17.10                                       | 18.90                                       | 1                             | 25.2                                          | 59.5                                | 5.0                                    |
| 1.5KE20                           | 1N6278                  | 16.20                                       | 18.00                                       | 22.00                                       | 1                             | 29.1                                          | 51.5                                | 5.0                                    |
| 1.5KE20A                          | 1N6278A                 | 17.10                                       | 19.00                                       | 21.00                                       | 1                             | 27.7                                          | 54.0                                | 5.0                                    |
| 1.5KE22                           | 1N6279                  | 17.80                                       | 19.80                                       | 24.20                                       | 1                             | 31.9                                          | 47.0                                | 5.0                                    |
| 1.5KE22A                          | 1N6279A                 | 18.80                                       | 20.90                                       | 23.10                                       | 1                             | 30.6                                          | 49.0                                | 5.0                                    |
| 1.5KE24                           | 1N6280                  | 19.40                                       | 21.60                                       | 26.40                                       | 1                             | 34.7                                          | 43.0                                | 5.0                                    |
| 1.5KE24A                          | 1N6280A                 | 20.50                                       | 22.80                                       | 25.20                                       | 1                             | 33.2                                          | 45.0                                | 5.0                                    |
| 1.5KE27                           | 1N6281                  | 21.80                                       | 24.30                                       | 29.70                                       | 1                             | 39.1                                          | 38.5                                | 5.0                                    |
| 1.5KE27A                          | 1N6281A                 | 23.10                                       | 25.70                                       | 28.40                                       | 1                             | 37.5                                          | 40.0                                | 5.0                                    |
| 1.5KE30                           | 1N6282                  | 24.30                                       | 27.00                                       | 33.00                                       | 1                             | 43.5                                          | 34.5                                | 5.0                                    |
| 1.5KE30A                          | 1N6282A                 | 25.60                                       | 28.50                                       | 31.50                                       | 1                             | 41.4                                          | 36.0                                | 5.0                                    |
| 1.5KE33                           | 1N6283                  | 26.80                                       | 29.70                                       | 36.30                                       | 1                             | 47.7                                          | 31.5                                | 5.0                                    |
| 1.5KE33A                          | 1N6283A                 | 28.20                                       | 31.40                                       | 34.70                                       | 1                             | 45.7                                          | 33.0                                | 5.0                                    |
| 1.5KE36                           | 1N6284                  | 29.10                                       | 32.40                                       | 39.60                                       | 1                             | 52.0                                          | 29.0                                | 5.0                                    |
| 1.5KE36A                          | 1N6284A                 | 30.80                                       | 34.20                                       | 37.80                                       | 1                             | 49.9                                          | 30.0                                | 5.0                                    |
| 1.5KE39                           | 1N6285                  | 31.60                                       | 35.10                                       | 42.90                                       | 1                             | 56.4                                          | 26.5                                | 5.0                                    |
| 1.5KE39A                          | 1N6285A                 | 33.30                                       | 37.10                                       | 41.00                                       | 1                             | 53.9                                          | 28.0                                | 5.0                                    |
| 1.5KE43                           | 1N6286                  | 34.80                                       | 38.70                                       | 47.30                                       | 1                             | 61.9                                          | 24.0                                | 5.0                                    |
| 1.5KE43A                          | 1N6286A                 | 36.80                                       | 40.90                                       | 45.20                                       | 1                             | 59.3                                          | 25.3                                | 5.0                                    |
| 1.5KE47                           | 1N6287                  | 38.10                                       | 42.30                                       | 51.70                                       | 1                             | 67.8                                          | 22.2                                | 5.0                                    |
| 1.5KE47A                          | 1N6287A                 | 40.20                                       | 44.70                                       | 49.40                                       | 1                             | 64.8                                          | 23.2                                | 5.0                                    |
| 1.5KE51                           | 1N6288                  | 41.30                                       | 45.90                                       | 56.10                                       | 1                             | 73.5                                          | 20.4                                | 5.0                                    |
| 1.5KE51A                          | 1N6288A                 | 43.60                                       | 48.50                                       | 53.60                                       | 1                             | 70.1                                          | 21.4                                | 5.0                                    |
| 1.5KE56                           | 1N6289                  | 45.60                                       | 50.40                                       | 61.60                                       | 1                             | 80.5                                          | 18.6                                | 5.0                                    |
| 1.5KE56A                          | 1N6289A                 | 47.80                                       | 53.20                                       | 58.80                                       | 1                             | 77.0                                          | 19.5                                | 5.0                                    |
| 1.5KE62                           | 1N6290                  | 50.20                                       | 55.80                                       | 68.20                                       | 1                             | 89.0                                          | 16.9                                | 5.0                                    |
| 1.5KE62A                          | 1N6290A                 | 53.00                                       | 58.90                                       | 65.10                                       | 1                             | 85.0                                          | 17.7                                | 5.0                                    |
| 1.5KE68                           | 1N6291                  | 55.10                                       | 61.20                                       | 74.80                                       | 1                             | 98.0                                          | 15.3                                | 5.0                                    |
| 1.5KE68A                          | 1N6291A                 | 58.10                                       | 64.60                                       | 71.40                                       | 1                             | 92.0                                          | 16.3                                | 5.0                                    |
| 1.5KE75                           | 1N6292                  | 60.70                                       | 67.50                                       | 82.50                                       | 1                             | 108.0                                         | 13.9                                | 5.0                                    |
| 1.5KE75A                          | 1N6292A                 | 64.10                                       | 71.30                                       | 78.80                                       | 1                             | 103.0                                         | 14.6                                | 5.0                                    |
| 1.5KE82                           | 1N6293                  | 66.40                                       | 73.80                                       | 90.20                                       | 1                             | 118.0                                         | 12.7                                | 5.0                                    |
| 1.5KE82A                          | 1N6293A                 | 70.10                                       | 77.90                                       | 86.10                                       | 1                             | 113.0                                         | 13.3                                | 5.0                                    |
| 1.5KE91                           | 1N6294                  | 73.70                                       | 81.90                                       | 100.00                                      | 1                             | 131.0                                         | 11.4                                | 5.0                                    |
| 1.5KE91A                          | 1N9294A                 | 77.80                                       | 86.50                                       | 95.50                                       | 1                             | 125.0                                         | 12.0                                | 5.0                                    |
| 1.5KE100                          | 1N6295                  | 81.00                                       | 90.00                                       | 110.00                                      | 1                             | 144.0                                         | 10.4                                | 5.0                                    |
| 1.5KE100A                         | 1N6295A                 | 85.50                                       | 95.00                                       | 105.00                                      | 1                             | 137.0                                         | 11.0                                | 5.0                                    |
| 1.5KE110                          | 1N6296                  | 89.20                                       | 99.00                                       | 121.00                                      | 1                             | 158.0                                         | 9.5                                 | 5.0                                    |
| 1.5KE110A                         | 1N6296A                 | 94.00                                       | 105.00                                      | 116.00                                      | 1                             | 152.0                                         | 9.9                                 | 5.0                                    |
| 1.5KE120                          | 1N6297                  | 97.20                                       | 108.00                                      | 132.00                                      | 1                             | 173.0                                         | 8.7                                 | 5.0                                    |
| 1.5KE120A                         | 1N6297A                 | 102.00                                      | 114.00                                      | 126.00                                      | 1                             | 165.0                                         | 9.1                                 | 5.0                                    |
| 1.5KE130                          | 1N6298                  | 105.00                                      | 117.00                                      | 143.00                                      | 1                             | 187.0                                         | 8.0                                 | 5.0                                    |
| 1.5KE130A                         | 1N6298A                 | 111.00                                      | 124.00                                      | 137.00                                      | 1                             | 179.0                                         | 8.4                                 | 5.0                                    |

## UNI-DIRECTIONAL 1500 Watt Axial Lead TVS

| UNI-DIRECTIONAL PART NUMBER | JEDEC PART NUMBER | REVERSE STAND-OFF VOLTAGE VRWM (V) | BREAKDOWN VOLTAGE VBR (V) MIN. @IT | BREAKDOWN VOLTAGE VBR (V) MAX. @IT | TEST CURRENT IT (mA) | MAXIMUM CLAMPING VOLTAGE @I <sub>PP</sub> VC (V) | PEAK PULSE CURRENT I <sub>PP</sub> (A) | REVERSE LEAKAGE @VRWM IR (uA) |
|-----------------------------|-------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|--------------------------------------------------|----------------------------------------|-------------------------------|
| 1.5KE150                    | 1N6299            | 121.00                             | 135.00                             | 165.00                             | 1                    | 215.0                                            | 7.0                                    | 5.0                           |
| 1.5KE150A                   | 1N6299A           | 128.00                             | 143.00                             | 158.00                             | 1                    | 207.0                                            | 7.2                                    | 5.0                           |
| 1.5KE160                    | 1N6300            | 130.00                             | 144.00                             | 176.00                             | 1                    | 230.0                                            | 6.5                                    | 5.0                           |
| 1.5KE160A                   | 1N6300A           | 136.00                             | 152.00                             | 168.00                             | 1                    | 219.0                                            | 6.8                                    | 5.0                           |
| 1.5KE170                    | 1N6301            | 138.00                             | 153.00                             | 187.00                             | 1                    | 244.0                                            | 6.2                                    | 5.0                           |
| 1.5KE170A                   | 1N6301A           | 145.00                             | 162.00                             | 179.00                             | 1                    | 234.0                                            | 6.4                                    | 5.0                           |
| 1.5KE180                    | 1N6302            | 146.00                             | 162.00                             | 198.00                             | 1                    | 258.0                                            | 5.8                                    | 5.0                           |
| 1.5KE180A                   | 1N6302A           | 154.00                             | 171.00                             | 189.00                             | 1                    | 246.0                                            | 6.1                                    | 5.0                           |
| 1.5KE200                    | 1N6303            | 162.00                             | 180.00                             | 220.00                             | 1                    | 287.0                                            | 5.2                                    | 5.0                           |
| 1.5KE200A                   | 1N6303A           | 171.00                             | 190.00                             | 210.00                             | 1                    | 274.0                                            | 5.5                                    | 5.0                           |
| 1.5KE220                    |                   | 175.00                             | 198.00                             | 242.00                             | 1                    | 344.0                                            | 4.3                                    | 5.0                           |
| 1.5KE220A                   |                   | 185.00                             | 209.00                             | 231.00                             | 1                    | 328.0                                            | 4.6                                    | 5.0                           |
| 1.5KE250                    |                   | 202.00                             | 225.00                             | 275.00                             | 1                    | 360.0                                            | 4.3                                    | 5.0                           |
| 1.5KE250A                   |                   | 214.00                             | 237.00                             | 263.00                             | 1                    | 344.0                                            | 4.5                                    | 5.0                           |
| 1.5KE300                    |                   | 243.00                             | 270.00                             | 330.00                             | 1                    | 430.0                                            | 3.6                                    | 5.0                           |
| 1.5KE300A                   |                   | 256.00                             | 285.00                             | 315.00                             | 1                    | 414.0                                            | 3.8                                    | 5.0                           |
| 1.5KE350                    |                   | 284.00                             | 315.00                             | 385.00                             | 1                    | 504.0                                            | 3.1                                    | 5.0                           |
| 1.5KE350A                   |                   | 300.00                             | 332.00                             | 368.00                             | 1                    | 482.0                                            | 3.2                                    | 5.0                           |
| 1.5KE400                    |                   | 324.00                             | 360.00                             | 440.00                             | 1                    | 574.0                                            | 2.7                                    | 5.0                           |
| 1.5KE400A                   |                   | 342.00                             | 380.00                             | 420.00                             | 1                    | 548.0                                            | 2.8                                    | 5.0                           |
| 1.5KE440                    |                   | 356.00                             | 396.00                             | 484.00                             | 1                    | 631.0                                            | 2.4                                    | 5.0                           |
| 1.5KE440A                   |                   | 376.00                             | 418.00                             | 462.00                             | 1                    | 600.0                                            | 2.6                                    | 5.0                           |

## BI-DIRECTIONAL 1500 Watt Axial Lead TVS

| BI-DIRECTIONAL PART NUMBER | JEDEC PART NUMBER | REVERSE STAND-OFF VOLTAGE VRWM (V) | BREAKDOWN VOLTAGE VBR (V) MIN. @IT | BREAKDOWN VOLTAGE VBR (V) MAX. @IT | TEST CURRENT IT (mA) | MAXIMUM CLAMPING VOLTAGE @I <sub>PP</sub> VC (V) | PEAK PULSE CURRENT I <sub>PP</sub> (A) | REVERSE LEAKAGE @VRWM IR (uA) |
|----------------------------|-------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|--------------------------------------------------|----------------------------------------|-------------------------------|
| 1.5KE6.8C                  | 1N6267C           | 5.50                               | 6.12                               | 7.48                               | 10                   | 10.8                                             | 139.0                                  | 2000.0                        |
| 1.5KE6.8CA                 | 1N6267CA          | 5.80                               | 6.45                               | 7.14                               | 10                   | 10.5                                             | 143.0                                  | 2000.0                        |
| 1.5KE7.5C                  | 1N6268C           | 6.05                               | 6.75                               | 8.25                               | 10                   | 11.7                                             | 128.0                                  | 1000.0                        |
| 1.5KE7.5CA                 | 1N6268CA          | 6.40                               | 7.13                               | 7.88                               | 10                   | 11.3                                             | 132.0                                  | 1000.0                        |
| 1.5KE8.2C                  | 1N6269C           | 6.63                               | 7.38                               | 9.02                               | 10                   | 12.5                                             | 120.0                                  | 400.0                         |
| 1.5KE8.2CA                 | 1N6269CA          | 7.02                               | 7.79                               | 8.61                               | 10                   | 12.1                                             | 124.0                                  | 400.0                         |
| 1.5KE9.1C                  | 1N6270C           | 7.37                               | 8.19                               | 10.00                              | 1                    | 13.8                                             | 109.0                                  | 100.0                         |
| 1.5KE9.1CA                 | 1N6270CA          | 7.38                               | 8.65                               | 9.50                               | 1                    | 13.4                                             | 112.0                                  | 100.0                         |
| 1.5KE10C                   | 1N62701C          | 8.10                               | 9.00                               | 11.00                              | 1                    | 15.0                                             | 100.0                                  | 20.0                          |
| 1.5KE10CA                  | 1N6271CA          | 8.55                               | 9.50                               | 10.50                              | 1                    | 14.5                                             | 103.0                                  | 20.0                          |
| 1.5KE11C                   | 1N6272C           | 8.92                               | 9.90                               | 12.10                              | 1                    | 16.2                                             | 93.0                                   | 10.0                          |
| 1.5KE11CA                  | 1N6272CA          | 9.40                               | 10.50                              | 11.60                              | 1                    | 15.6                                             | 96.0                                   | 10.0                          |
| 1.5KE12C                   | 1N6273C           | 9.72                               | 10.80                              | 13.20                              | 1                    | 17.3                                             | 87.0                                   | 5.0                           |
| 1.5KE12CA                  | 1N6273CA          | 10.20                              | 11.40                              | 12.60                              | 1                    | 16.7                                             | 90.0                                   | 5.0                           |
| 1.5KE13C                   | 1N6274C           | 10.50                              | 11.70                              | 14.30                              | 1                    | 19.0                                             | 79.0                                   | 5.0                           |
| 1.5KE13CA                  | 1N6274CA          | 11.10                              | 12.40                              | 13.70                              | 1                    | 18.2                                             | 82.0                                   | 5.0                           |
| 1.5KE15C                   | 1N6275C           | 12.10                              | 13.50                              | 16.50                              | 1                    | 22.0                                             | 68.0                                   | 5.0                           |
| 1.5KE15CA                  | 1N6275CA          | 12.80                              | 14.30                              | 15.80                              | 1                    | 21.2                                             | 71.0                                   | 5.0                           |
| 1.5KE16C                   | 1N6276C           | 12.90                              | 14.40                              | 17.60                              | 1                    | 23.5                                             | 64.0                                   | 5.0                           |
| 1.5KE16CA                  | 1N6276CA          | 13.60                              | 15.20                              | 16.80                              | 1                    | 22.5                                             | 67.0                                   | 5.0                           |
| 1.5KE18C                   | 1N6277C           | 14.50                              | 16.20                              | 19.80                              | 1                    | 26.5                                             | 56.5                                   | 5.0                           |
| 1.5KE18CA                  | 1N6277CA          | 15.30                              | 17.10                              | 18.90                              | 1                    | 25.2                                             | 59.5                                   | 5.0                           |
| 1.5KE20C                   | 1N6278C           | 16.20                              | 18.00                              | 22.00                              | 1                    | 29.1                                             | 51.5                                   | 5.0                           |
| 1.5KE20CA                  | 1N6278CA          | 17.10                              | 19.00                              | 21.00                              | 1                    | 27.7                                             | 54.0                                   | 5.0                           |
| 1.5KE22C                   | 1N6279C           | 17.80                              | 19.80                              | 24.20                              | 1                    | 31.9                                             | 47.0                                   | 5.0                           |
| 1.5KE22CA                  | 1N6279CA          | 18.80                              | 20.90                              | 23.10                              | 1                    | 30.6                                             | 49.0                                   | 5.0                           |
| 1.5KE24C                   | 1N6280C           | 19.40                              | 21.60                              | 26.40                              | 1                    | 34.7                                             | 43.0                                   | 5.0                           |
| 1.5KE24CA                  | 1N6280CA          | 20.50                              | 22.80                              | 25.20                              | 1                    | 33.2                                             | 45.0                                   | 5.0                           |
| 1.5KE27C                   | 1N6281C           | 21.80                              | 24.30                              | 29.70                              | 1                    | 39.1                                             | 38.5                                   | 5.0                           |
| 1.5KE27CA                  | 1N6281CA          | 23.10                              | 25.70                              | 28.40                              | 1                    | 37.5                                             | 40.0                                   | 5.0                           |
| 1.5KE30C                   | 1N6282C           | 24.30                              | 27.00                              | 33.00                              | 1                    | 43.5                                             | 34.5                                   | 5.0                           |
| 1.5KE30CA                  | 1N6282CA          | 25.60                              | 28.50                              | 31.50                              | 1                    | 41.4                                             | 36.0                                   | 5.0                           |
| 1.5KE33C                   | 1N6283C           | 26.80                              | 29.70                              | 36.30                              | 1                    | 47.7                                             | 31.5                                   | 5.0                           |
| 1.5KE33CA                  | 1N6283CA          | 28.20                              | 31.40                              | 34.70                              | 1                    | 45.7                                             | 33.0                                   | 5.0                           |
| 1.5KE36C                   | 1N6284C           | 29.10                              | 32.40                              | 39.60                              | 1                    | 52.0                                             | 29.0                                   | 5.0                           |
| 1.5KE36CA                  | 1N6284CA          | 30.80                              | 34.20                              | 37.80                              | 1                    | 49.9                                             | 30.0                                   | 5.0                           |
| 1.5KE39C                   | 1N6285C           | 31.60                              | 35.10                              | 42.90                              | 1                    | 56.4                                             | 26.5                                   | 5.0                           |
| 1.5KE39CA                  | 1N6285CA          | 33.30                              | 37.10                              | 41.00                              | 1                    | 53.9                                             | 28.0                                   | 5.0                           |
| 1.5KE43C                   | 1N6286C           | 34.80                              | 38.70                              | 47.30                              | 1                    | 61.9                                             | 24.0                                   | 5.0                           |
| 1.5KE43CA                  | 1N6286CA          | 36.80                              | 40.90                              | 45.20                              | 1                    | 59.3                                             | 25.3                                   | 5.0                           |
| 1.5KE47C                   | 1N6287C           | 38.10                              | 42.30                              | 51.70                              | 1                    | 67.8                                             | 22.2                                   | 5.0                           |
| 1.5KE47CA                  | 1N6287CA          | 40.20                              | 44.70                              | 49.40                              | 1                    | 64.8                                             | 23.2                                   | 5.0                           |
| 1.5KE51C                   | 1N6288C           | 41.30                              | 45.90                              | 56.10                              | 1                    | 73.5                                             | 20.4                                   | 5.0                           |
| 1.5KE51CA                  | 1N6288CA          | 43.60                              | 48.50                              | 53.60                              | 1                    | 70.1                                             | 21.4                                   | 5.0                           |
| 1.5KE56C                   | 1N6289C           | 45.60                              | 50.40                              | 61.60                              | 1                    | 80.5                                             | 18.6                                   | 5.0                           |
| 1.5KE56CA                  | 1N6289CA          | 47.80                              | 53.20                              | 58.80                              | 1                    | 77.0                                             | 19.5                                   | 5.0                           |
| 1.5KE62C                   | 1N6290C           | 50.20                              | 55.80                              | 68.20                              | 1                    | 89.0                                             | 16.9                                   | 5.0                           |
| 1.5KE62CA                  | 1N6290CA          | 53.00                              | 58.90                              | 65.10                              | 1                    | 85.0                                             | 17.7                                   | 5.0                           |
| 1.5KE68C                   | 1N6291C           | 55.10                              | 61.20                              | 74.80                              | 1                    | 98.0                                             | 15.3                                   | 5.0                           |
| 1.5KE68CA                  | 1N6291CA          | 58.10                              | 64.60                              | 71.40                              | 1                    | 92.0                                             | 16.3                                   | 5.0                           |
| 1.5KE75C                   | 1N6292C           | 60.70                              | 67.50                              | 82.50                              | 1                    | 108.0                                            | 13.9                                   | 5.0                           |
| 1.5KE75CA                  | 1N6292CA          | 64.10                              | 71.30                              | 78.80                              | 1                    | 103.0                                            | 14.6                                   | 5.0                           |
| 1.5KE82C                   | 1N6293C           | 66.40                              | 73.80                              | 90.20                              | 1                    | 118.0                                            | 12.7                                   | 5.0                           |
| 1.5KE82CA                  | 1N6293CA          | 70.10                              | 77.90                              | 86.10                              | 1                    | 113.0                                            | 13.3                                   | 5.0                           |
| 1.5KE91C                   | 1N6294C           | 73.70                              | 81.90                              | 100.00                             | 1                    | 131.0                                            | 11.4                                   | 5.0                           |
| 1.5KE91CA                  | 1N9294CA          | 77.80                              | 86.50                              | 95.50                              | 1                    | 125.0                                            | 12.0                                   | 5.0                           |
| 1.5KE100C                  | 1N6295C           | 81.00                              | 90.00                              | 110.00                             | 1                    | 144.0                                            | 10.4                                   | 5.0                           |
| 1.5KE100CA                 | 1N6295CA          | 85.50                              | 95.00                              | 105.00                             | 1                    | 137.0                                            | 11.0                                   | 5.0                           |
| 1.5KE110C                  | 1N6296C           | 89.20                              | 99.00                              | 121.00                             | 1                    | 158.0                                            | 9.5                                    | 5.0                           |
| 1.5KE110CA                 | 1N6296CA          | 94.00                              | 105.00                             | 116.00                             | 1                    | 152.0                                            | 9.9                                    | 5.0                           |
| 1.5KE120C                  | 1N6297C           | 97.20                              | 108.00                             | 132.00                             | 1                    | 173.0                                            | 8.7                                    | 5.0                           |
| 1.5KE120CA                 | 1N6297CA          | 102.00                             | 114.00                             | 126.00                             | 1                    | 165.0                                            | 9.1                                    | 5.0                           |
| 1.5KE130C                  | 1N6298C           | 105.00                             | 117.00                             | 143.00                             | 1                    | 187.0                                            | 8.0                                    | 5.0                           |
| 1.5KE130CA                 | 1N6298CA          | 111.00                             | 124.00                             | 137.00                             | 1                    | 179.0                                            | 8.4                                    | 5.0                           |

# BI-DIRECTIONAL 1500 Watt Axial Lead TVS

| BI-DIRECTIONAL PART NUMBER | JEDEC PART NUMBER | REVERSE STAND-OFF VOLTAGE VRWM (V) | BREAKDOWN VOLTAGE VBR (V) MIN. @IT | BREAKDOWN VOLTAGE VBR (V) MAX. @IT | TEST CURRENT IT (mA) | MAXIMUM CLAMPING VOLTAGE @I <sub>PP</sub> VC (V) | PEAK PULSE CURRENT I <sub>PP</sub> (A) | REVERSE LEAKAGE @VRWM IR (uA) |
|----------------------------|-------------------|------------------------------------|------------------------------------|------------------------------------|----------------------|--------------------------------------------------|----------------------------------------|-------------------------------|
| 1.5KE150C                  | 1N6299C           | 121.00                             | 135.00                             | 165.00                             | 1                    | 215.0                                            | 7.0                                    | 5.0                           |
| 1.5KE150CA                 | 1N6299CA          | 128.00                             | 143.00                             | 158.00                             | 1                    | 207.0                                            | 7.2                                    | 5.0                           |
| 1.5KE160C                  | 1N6300C           | 130.00                             | 144.00                             | 176.00                             | 1                    | 230.0                                            | 6.5                                    | 5.0                           |
| 1.5KE160CA                 | 1N6300CA          | 136.00                             | 152.00                             | 168.00                             | 1                    | 219.0                                            | 6.8                                    | 5.0                           |
| 1.5KE170C                  | 1N6301C           | 138.00                             | 153.00                             | 187.00                             | 1                    | 244.0                                            | 6.2                                    | 5.0                           |
| 1.5KE170CA                 | 1N6301CA          | 145.00                             | 162.00                             | 179.00                             | 1                    | 234.0                                            | 6.4                                    | 5.0                           |
| 1.5KE180C                  | 1N6302C           | 146.00                             | 162.00                             | 198.00                             | 1                    | 258.0                                            | 5.8                                    | 5.0                           |
| 1.5KE180CA                 | 1N6302CA          | 154.00                             | 171.00                             | 189.00                             | 1                    | 246.0                                            | 6.1                                    | 5.0                           |
| 1.5KE200C                  | 1N6303C           | 162.00                             | 180.00                             | 220.00                             | 1                    | 287.0                                            | 5.2                                    | 5.0                           |
| 1.5KE200CA                 | 1N6303CA          | 171.00                             | 190.00                             | 210.00                             | 1                    | 274.0                                            | 5.5                                    | 5.0                           |
| 1.5KE220C                  |                   | 175.00                             | 198.00                             | 242.00                             | 1                    | 344.0                                            | 4.3                                    | 5.0                           |
| 1.5KE220CA                 |                   | 185.00                             | 209.00                             | 231.00                             | 1                    | 328.0                                            | 4.6                                    | 5.0                           |
| 1.5KE250C                  |                   | 202.00                             | 225.00                             | 275.00                             | 1                    | 360.0                                            | 4.3                                    | 5.0                           |
| 1.5KE250CA                 |                   | 214.00                             | 237.00                             | 263.00                             | 1                    | 344.0                                            | 4.5                                    | 5.0                           |
| 1.5KE300C                  |                   | 243.00                             | 270.00                             | 330.00                             | 1                    | 430.0                                            | 3.6                                    | 5.0                           |
| 1.5KE300CA                 |                   | 256.00                             | 285.00                             | 315.00                             | 1                    | 414.0                                            | 3.8                                    | 5.0                           |
| 1.5KE350C                  |                   | 284.00                             | 315.00                             | 385.00                             | 1                    | 504.0                                            | 3.1                                    | 5.0                           |
| 1.5KE350CA                 |                   | 300.00                             | 332.00                             | 368.00                             | 1                    | 482.0                                            | 3.2                                    | 5.0                           |
| 1.5KE400C                  |                   | 324.00                             | 360.00                             | 440.00                             | 1                    | 574.0                                            | 2.7                                    | 5.0                           |
| 1.5KE400CA                 |                   | 342.00                             | 380.00                             | 420.00                             | 1                    | 548.0                                            | 2.8                                    | 5.0                           |
| 1.5KE440C                  |                   | 356.00                             | 396.00                             | 484.00                             | 1                    | 631.0                                            | 2.4                                    | 5.0                           |
| 1.5KE440CA                 |                   | 376.00                             | 418.00                             | 462.00                             | 1                    | 600.0                                            | 2.6                                    | 5.0                           |