

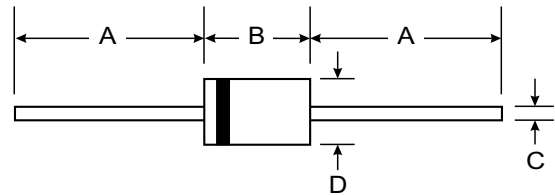
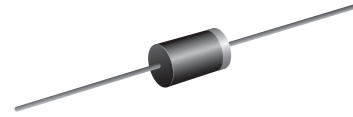
VOLTAGE RANGE: 6.8 - 600 V
POWER: 1500Watts

Features

- Glass Passivated Die Construction
6.8V – 600 V Standoff Voltage
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability

Mechanical Data

- Case: DO-201AD Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Unidirectional – Device Code and Cathode Band
- Bidirectional – Device Code Only
- Weight: 1.20 grams (approx.)



| DO-201AD | | |
|----------------------|-------|------|
| Dim | Min | Max |
| A | 25.40 | — |
| B | 7.20 | 9.50 |
| C | 1.00 | 1.20 |
| D | 4.80 | 5.30 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|--|----------------|--------------|------------------|
| Peak Pulse Power Dissipation at $T_A = 25^\circ\text{C}$ (Note 1, 2, 5) Figure 3 | PPPM | 1500 Minimum | W |
| Peak Forward Surge Current (Note 3) | IFSM | 200 | A |
| Peak Pulse Current on 10/1000 μS Waveform (Note 1) Figure 1 | IPPM | See Table 1 | A |
| Steady State Power Dissipation (Note 2, 4) | PM(AV) | 5.0 | W |
| Operating and Storage Temperature Range | T_i, T_{STG} | -65 to +175 | $^\circ\text{C}$ |

- Note: 1. Non-repetitive current pulse, per Figure 1 and derated above $T_A = 25^\circ\text{C}$ per Figure 4.
 2. Mounted on 40mm² copper pad.
 3. 8.3ms single half sine-wave duty cycle = 4 pulses per minutes maximum.
 4. Lead temperature at $75^\circ\text{C} = T_L$.
 5. Peak pulse power waveform is 10/1000 μS .



| TYPE | | Reverse Stand- Off Voltage | Breakdown Voltage Min. @I _T | Breakdown Voltage Max. @ I _T | Test Current | Maximum Clamping Voltage @I _{PP} | Peak Pulse Current | Reverse Leakage @V _{RWM} |
|-----------|------------|----------------------------|--|---|---------------------|---|---------------------|-----------------------------------|
| (UNI) | (BI) | V _{RWM} (V) | V _{BR} MIN(V) | V _{BR} MAX(V) | I _T (mA) | V _C (V) | I _{PP} (A) | I _R (uA) |
| 1.5KE6.8A | 1.5KE6.8CA | 5.80 | 6.45 | 7.14 | 10 | 10.5 | 144.8 | 1000.0 |
| 1.5KE7.5A | 1.5KE7.5CA | 6.40 | 7.13 | 7.88 | 10 | 11.3 | 134.5 | 500.0 |
| 1.5KE8.2A | 1.5KE8.2CA | 7.02 | 7.79 | 8.61 | 10 | 12.1 | 125.6 | 200.0 |
| 1.5KE9.1A | 1.5KE9.1CA | 7.78 | 8.65 | 9.55 | 1.0 | 13.4 | 113.4 | 50.0 |
| 1.5KE10A | 1.5KE10CA | 8.55 | 9.50 | 10.5 | 1.0 | 14.5 | 104.8 | 10.0 |
| 1.5KE11A | 1.5KE11CA | 9.40 | 10.5 | 11.6 | 1.0 | 15.6 | 97.4 | 5.0 |
| 1.5KE12A | 1.5KE12CA | 10.2 | 11.4 | 12.6 | 1.0 | 16.7 | 91.0 | 5.0 |
| 1.5KE13A | 1.5KE13CA | 11.1 | 12.4 | 13.7 | 1.0 | 18.2 | 83.5 | 5.0 |
| 1.5KE15A | 1.5KE15CA | 12.8 | 14.3 | 15.8 | 1.0 | 21.2 | 71.7 | 5.0 |
| 1.5KE16A | 1.5KE16CA | 13.6 | 15.2 | 16.8 | 1.0 | 22.5 | 67.6 | 5.0 |
| 1.5KE18A | 1.5KE18CA | 15.3 | 17.1 | 18.9 | 1.0 | 25.2 | 60.3 | 5.0 |
| 1.5KE20A | 1.5KE20CA | 17.1 | 19.0 | 21.0 | 1.0 | 27.7 | 54.9 | 5.0 |
| 1.5KE22A | 1.5KE22CA | 18.8 | 20.9 | 23.1 | 1.0 | 30.6 | 49.7 | 5.0 |
| 1.5KE24A | 1.5KE24CA | 20.5 | 22.8 | 25.2 | 1.0 | 33.2 | 45.8 | 5.0 |
| 1.5KE27A | 1.5KE27CA | 23.1 | 25.7 | 28.4 | 1.0 | 37.5 | 40.5 | 5.0 |
| 1.5KE30A | 1.5KE30CA | 25.6 | 28.5 | 31.5 | 1.0 | 41.4 | 36.7 | 5.0 |
| 1.5KE33A | 1.5KE33CA | 28.2 | 31.4 | 34.7 | 1.0 | 45.7 | 33.3 | 5.0 |
| 1.5KE36A | 1.5KE36CA | 30.8 | 34.2 | 37.8 | 1.0 | 49.9 | 30.5 | 5.0 |
| 1.5KE39A | 1.5KE39CA | 33.3 | 37.1 | 41.0 | 1.0 | 53.9 | 28.2 | 5.0 |
| 1.5KE43A | 1.5KE43CA | 36.8 | 40.9 | 45.2 | 1.0 | 59.3 | 25.6 | 5.0 |
| 1.5KE47A | 1.5KE47CA | 40.2 | 44.7 | 49.4 | 1.0 | 64.8 | 23.5 | 5.0 |
| 1.5KE51A | 1.5KE51CA | 43.6 | 48.5 | 53.6 | 1.0 | 70.1 | 21.7 | 5.0 |
| 1.5KE56A | 1.5KE56CA | 47.8 | 53.2 | 58.8 | 1.0 | 77.0 | 19.7 | 5.0 |
| 1.5KE62A | 1.5KE62CA | 53.0 | 58.9 | 65.1 | 1.0 | 85.0 | 17.9 | 5.0 |
| 1.5KE68A | 1.5KE68CA | 58.1 | 64.6 | 71.4 | 1.0 | 92.0 | 16.5 | 5.0 |
| 1.5KE75A | 1.5KE75CA | 64.1 | 71.3 | 78.8 | 1.0 | 103 | 14.8 | 5.0 |
| 1.5KE82A | 1.5KE82CA | 70.1 | 77.9 | 86.1 | 1.0 | 113 | 13.5 | 5.0 |
| 1.5KE91A | 1.5KE91CA | 77.8 | 86.5 | 95.5 | 1.0 | 125 | 12.2 | 5.0 |
| 1.5KE100A | 1.5KE100CA | 85.5 | 95.0 | 105 | 1.0 | 137 | 11.1 | 5.0 |
| 1.5KE110A | 1.5KE110CA | 94.0 | 105 | 116 | 1.0 | 152 | 10.0 | 5.0 |
| 1.5KE120A | 1.5KE120CA | 102 | 114 | 126 | 1.0 | 165 | 9.2 | 5.0 |
| 1.5KE130A | 1.5KE130CA | 111 | 124 | 137 | 1.0 | 179 | 8.5 | 5.0 |
| 1.5KE150A | 1.5KE150CA | 128 | 143 | 158 | 1.0 | 207 | 7.3 | 5.0 |

For Bi-directional type having VRWM of 10 Volts and less, the IR limit is double



| TYPE | | Reverse Stand- Off Voltage | Breakdown Voltage Min. @I _T | Breakdown Voltage Max. @ I _T | Test Current | Maximum Clamping Voltage @I _{PP} | Peak Pulse Current | Reverse Leakage @ V _{RWM} |
|-----------|------------|----------------------------|--|---|---------------------|---|---------------------|------------------------------------|
| (UNI) | (BI) | V _{RWM} (V) | V _{BR MIN} (V) | V _{BR MAX} (V) | I _T (mA) | V _C (V) | I _{PP} (A) | I _R (uA) |
| 1.5KE160A | 1.5KE160CA | 136 | 152 | 168 | 1.0 | 219 | 6.9 | 5.0 |
| 1.5KE170A | 1.5KE170CA | 145 | 162 | 179 | 1.0 | 234 | 6.5 | 5.0 |
| 1.5KE180A | 1.5KE180CA | 154 | 171 | 189 | 1.0 | 246 | 6.2 | 5.0 |
| 1.5KE200A | 1.5KE200CA | 171 | 190 | 210 | 1.0 | 274 | 5.5 | 5.0 |
| 1.5KE220A | 1.5KE220CA | 185 | 209 | 231 | 1.0 | 328 | 4.6 | 5.0 |
| 1.5KE250A | 1.5KE250CA | 214 | 237 | 263 | 1.0 | 344 | 4.4 | 5.0 |
| 1.5KE300A | 1.5KE300CA | 256 | 285 | 315 | 1.0 | 414 | 3.7 | 5.0 |
| 1.5KE350A | 1.5KE350CA | 300 | 333 | 368 | 1.0 | 482 | 3.2 | 5.0 |
| 1.5KE400A | 1.5KE400CA | 342 | 380 | 420 | 1.0 | 548 | 2.8 | 5.0 |
| 1.5KE440A | 1.5KE440CA | 376 | 418 | 462 | 1.0 | 600 | 2.5 | 5.0 |
| 1.5KE500A | 1.5KE500CA | 427.5 | 475 | 525 | 1.0 | 690 | 2.17 | 5.0 |
| 1.5KE520A | 1.5KE520CA | 444.6 | 494 | 546 | 1.0 | 717.6 | 2.09 | 5.0 |
| 1.5KE550A | 1.5KE550CA | 470.3 | 522.5 | 577.5 | 1.0 | 759 | 1.98 | 5.0 |
| 1.5KE600A | 1.5KE600CA | 513 | 570 | 630 | 1.0 | 828 | 1.81 | 5.0 |

Ratings and Characteristic Curves $T_A=25^\circ\text{C}$ unless otherwise noted

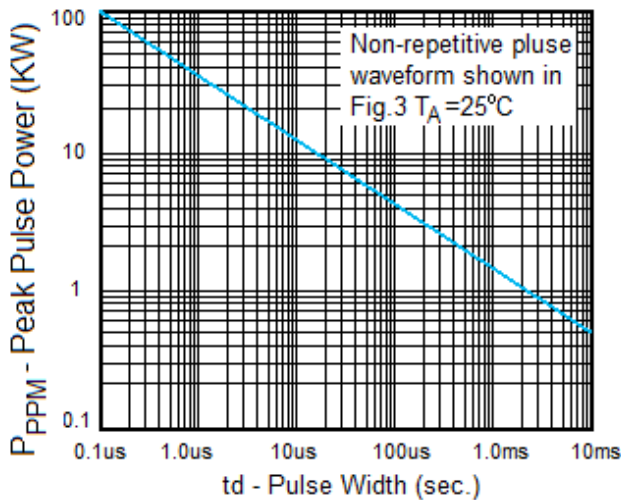


Fig. 1 Peak Pulse Power Rating

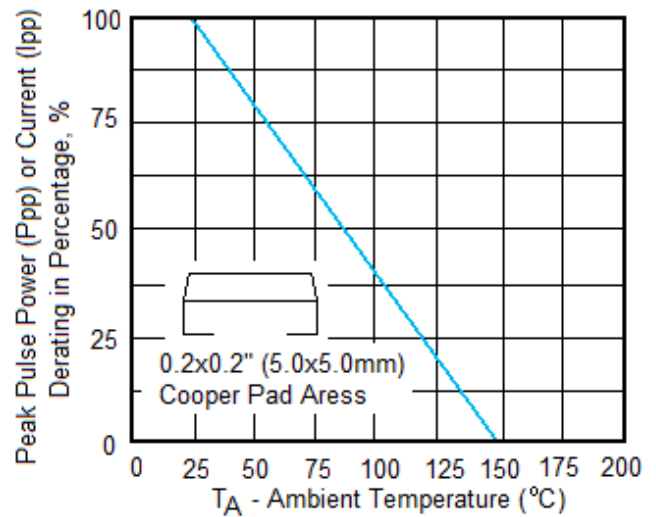


Fig.2 Pulse Derating Curve

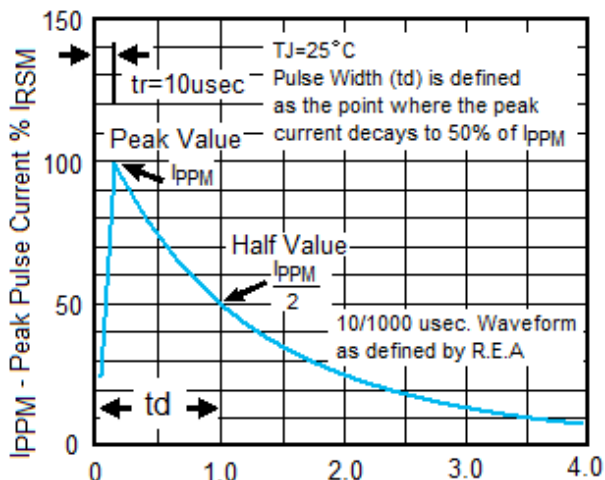


Fig.3 Pulse Waveform

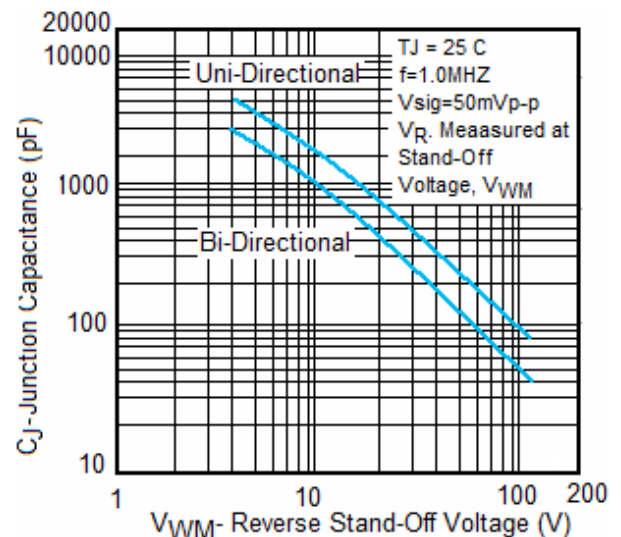


Fig. 4- Typical Junction Capacitance

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:

Click to view products by [SUNMATE](#) manufacturer:

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE8.2A](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#)
[SMBJ33CATR](#) [SMBJ6.5A](#) [SMBJ8.0A](#) [ESD101-B1-02ELS E6327](#) [ESD112-B1-02EL E6327](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-](#)
[HF](#) [3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [JANTX1N6126A](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [SCM1293A-04SO](#)
[ESD200-B1-CSP0201 E6327](#) [SM12-7](#) [CEN955 W/DATA](#) [VESD12A1A-HD1-GS08](#) [CPDQC5V0-HF](#) [D1213A-01LP4-7B](#) [ESD101-B1-02EL](#)
[E6327](#) [AOZ8808DI-03](#) [5KP15A](#) [5KP48A](#) [5KP90A](#) [ESD3V3D7-TP](#) [15KPA36A-LF](#) [P4KE56CA](#) [P4KE68A](#) [P4KE91CATR](#) [P6KE120A](#)
[P6KE13CA](#) [P6KE43CA](#) [P6KE6.8CA](#) [P6KE8.2](#) [P6SMBJ20CA](#) [JANTX1N6072A](#) [SR2835ESKG](#) [SA90CA](#)