

# Diodes

## Unidirectional and Bidirectional

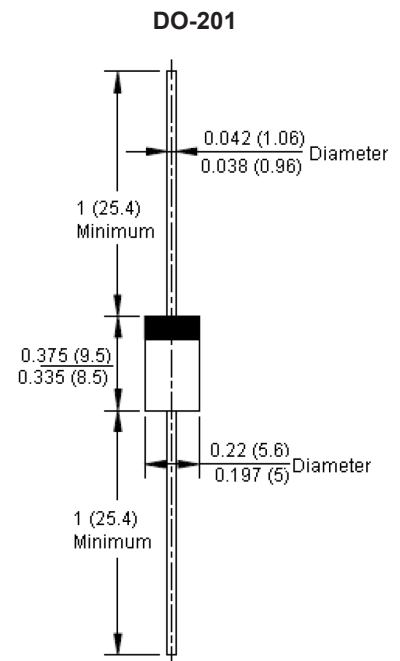


### Features

- Glass passivate chip
- Low leakage
- Uni and bidirectional unit
- Excellent clamping capability
- Plastic material has UL recognition 94V-0
- Fast response time

### Mechanical Data

Case : Moulded Plastic  
 Weight : 1.2 g



Dimensions : Inches (Millimetres)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified  
 Single phase, half wave, 60Hz, resistive or inductive load  
 For capacitive load, derate current by 20%

| Characteristics  | Symbol             | Value         | Unit     |
|--|--------------------|---------------|----------|
| Peak Power Dissipation at TA = 25°C<br>TP = 1 ms   | P <sub>PK</sub>    | Minimum 1,500 | Watts    |
| Peak Forward Surge Current<br>8.3 ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method) | I <sub>FSM</sub>   | 200           | Am-peres |
| Steady State Power Dissipation at T <sub>L</sub> = 75°C<br>Lead Lengths 0.375 inches (9.5 mm)            | P <sub>M(AV)</sub> | 5             | Watts    |
| Operating Temperature Range  | T <sub>J</sub>     | -55 to + 150  | °C       |
| Storage Temperature Range  | T <sub>STG</sub>   | -55 to + 175  |          |

| Part Number | Part Number | Reverse Standoff Voltage | Breakdown Voltage BV Volts @ I <sub>t</sub> |          |                     | Maximum Reverse Leakage @ VR | Maximum Clamping Voltage @ I <sub>pp</sub> | Maximum Peak Pulse Current | Maximum Voltage Temperature Variation of Bv |
|-------------|-------------|--------------------------|---|----------|---------------------|------------------------------|--|----------------------------|---|
|             |             |                          | Min. (V)                                    | Max. (V) | I <sub>t</sub> (mA) |                              |  |                            |   |
| (UNI)       | (BI)        | VR(V)                    | Min. (V)                                    | Max. (V) | I <sub>t</sub> (mA) | IR (µA)                      | V <sub>c</sub> (V)                         | I <sub>pp</sub> (A)        | mV/°C                                       |
| 1.5KE6.8A   | 1.5KE6.8CA  | 5.8                      | 6.45  | 7.14     | 10                  | 1000                         | 10.5                                       | 143                        | 0.057                                       |
| 1.5KE7.5A   | 1.5KE7.5CA  | 6.4                      | 7.13  | 7.88     | 10                  | 500                          | 11.3                                       | 132                        | 0.061                                       |

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|-------------|-------------|--------------------------|---------------------------------|----------|---------|------------------------------|--------------------------------|----------------------------|---|
|             |             |                          | Min. (V)                        | Max. (V) | It (mA) |                              |                                |                            |   |
| (UNI)       | (BI)        | VR(V)                    |                                 |          |         | IR (µA)                      | Vc (V)                         | Ipp (A)                    | mV/°C                                       |
| 1.5KE8.2A   | 1.5KE8.2CA  | 7.02                     | 7.79                            | 8.61     | 10      | 200                          | 12.1                           | 124                        | 0.065                                       |
| 1.5KE10A    | 1.5KE10CA   | 8.55                     | 9.5                             | 10.5     | 1       | 10                           | 14.5                           | 103                        | 0.073                                       |
| 1.5KE12A    | 1.5KE12CA   | 10.2                     | 11.4                            | 12.6     | 1       | 5                            | 16.7                           | 90                         | 0.078                                       |
| 1.5KE13A    | 1.5KE13CA   | 11.1                     | 12.4                            | 13.7     | 1       | 5                            | 18.2                           | 82                         | 0.081                                       |
| 1.5KE15A    | 1.5KE15CA   | 12.8                     | 14.3                            | 15.8     | 1       | 5                            | 21.2                           | 71                         | 0.084                                       |
| 1.5KE16A    | 1.5KE16CA   | 13.6                     | 15.2                            | 16.8     | 1       | 5                            | 22.5                           | 67                         | 0.086                                       |
| 1.5KE18A    | 1.5KE18CA   | 15.3                     | 17.1                            | 18.9     | 1       | 5                            | 25.2                           | 59.5                       | 0.088                                       |
| 1.5KE20A    | 1.5KE20CA   | 17.1                     | 19                              | 21       | 1       | 5                            | 27.7                           | 54                         | 0.09  |
| 1.5KE22A    | 1.5KE22CA   | 18.8                     | 20.9                            | 23.1     | 1       | 5                            | 30.6                           | 49                         | 0.092                                       |
| 1.5KE24A    | 1.5KE24CA   | 20.5                     | 22.8                            | 25.2     | 1       | 5                            | 33.2                           | 45                         | 0.094                                       |
| 1.5KE27A    | 1.5KE27CA   | 23.1                     | 25.7                            | 28.4     | 1       | 5                            | 37.5                           | 40                         | 0.096                                       |
| 1.5KE30A    | 1.5KE30CA   | 25.6                     | 28.5                            | 31.5     | 1       | 5                            | 41.4                           | 36                         | 0.097                                       |
| 1.5KE33A    | 1.5KE33CA   | 28.2                     | 31.4                            | 34.7     | 1       | 5                            | 45.7                           | 33                         | 0.098                                       |
| 1.5KE36A    | 1.5KE36CA   | 30.8                     | 34.2                            | 37.8     | 1       | 5                            | 49.9                           | 30                         | 0.099                                       |
| 1.5KE39A    | 1.5KE39CA   | 33.3                     | 37.1                            | 41       | 1       | 5                            | 53.9                           | 28                         | 0.1   |
| 1.5KE43A    | 1.5KE43CA   | 36.8                     | 40.9                            | 45.2     | 1       | 5                            | 59.3                           | 25.3                       | 0.101                                       |
| 1.5KE47A    | 1.5KE47CA   | 40.2                     | 44.7                            | 49.4     | 1       | 5                            | 64.8                           | 23.2                       | 0.101                                       |
| 1.5KE51A    | 1.5KE51CA   | 43.6                     | 48.5                            | 53.6     | 1       | 5                            | 70.1                           | 21.4                       | 0.102                                       |
| 1.5KE56A    | 1.5KE56CA   | 47.8                     | 53.2                            | 58.8     | 1       | 5                            | 77                             | 19.5                       | 0.103                                       |
| 1.5KE62A    | 1.5KE62CA   | 53                       | 58.9                            | 65.1     | 1       | 5                            | 85                             | 17.7                       | 0.104                                       |
| 1.5KE68A    | 1.5KE68CA   | 58.1                     | 64.6                            | 71.4     | 1       | 5                            | 92                             | 16.3                       | 0.104                                       |
| 1.5KE75A    | 1.5KE75CA   | 64.7                     | 71.3                            | 78.8     | 1       | 5                            | 103                            | 14.6                       | 0.105                                       |
| 1.5KE91A    | 1.5KE91CA   | 77.8                     | 86.5                            | 95.5     | 1       | 5                            | 125                            | 12                         | 0.106                                       |
| 1.5KE100A   | 1.5KE100CA  | 85.5                     | 95                              | 105      | 1       | 5                            | 137                            | 11                         | 0.106                                       |

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