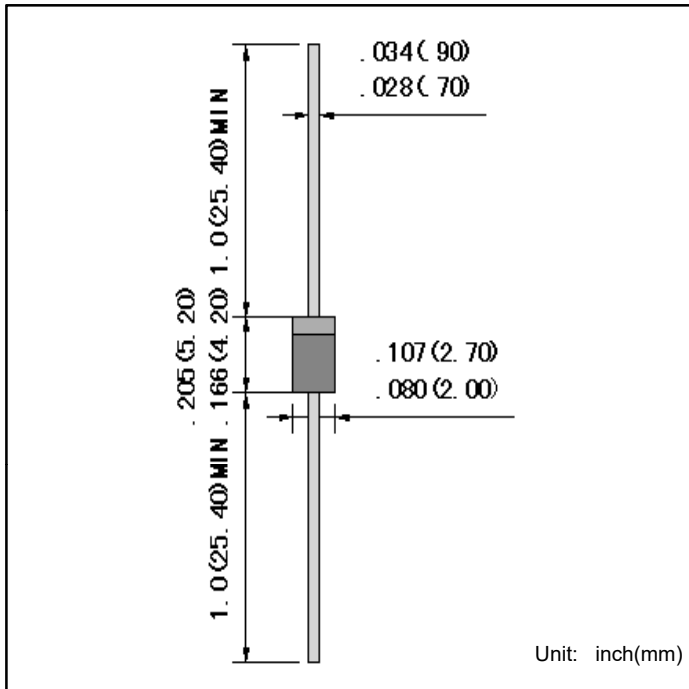


DO-41



### Features

- Glass passivated chip
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Low reverse leakage
- For use in stabilizing and clipping with high power rating
- RoHS compliant

### Mechanical Data

- Case: DO-41 Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Mounting position: Any

| Parameter                                              | Symbols        | Value       | Unit             |
|--------------------------------------------------------|----------------|-------------|------------------|
| DC Power dissipation at $T_L = 75^\circ\text{C}^{(1)}$ | $P_D$          | 1.0         | W                |
| Maximum forward voltage at $I_F=200\text{mA}$          | $V_F$          | 1.2         | V                |
| Junction temperature range                             | $T_J, T_{STG}$ | -55 to +150 | $^\circ\text{C}$ |
| Storage temperature range                              | $T_J, T_{STG}$ | -55 to +150 | $^\circ\text{C}$ |

Note :

( 1 )  $T_L$ =Lead temperature at 3/8" (9.5mm)from body

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

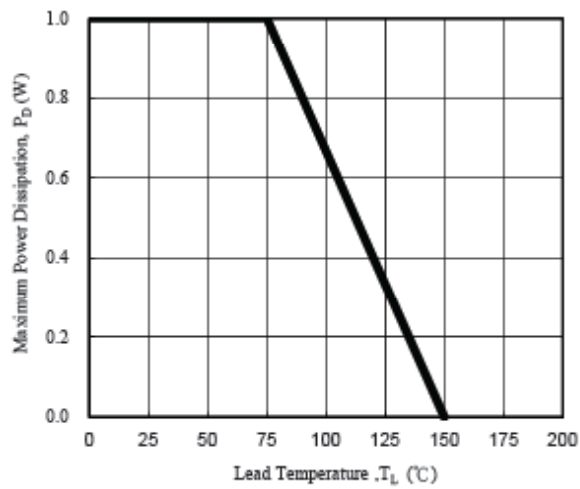


Fig. 1 - Power Temperature Derating Curve

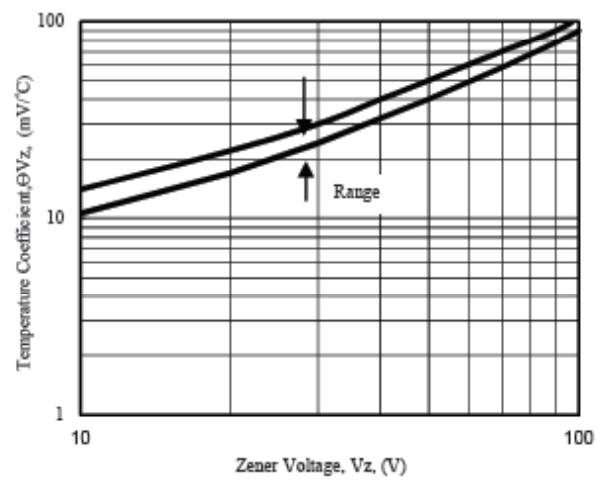


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

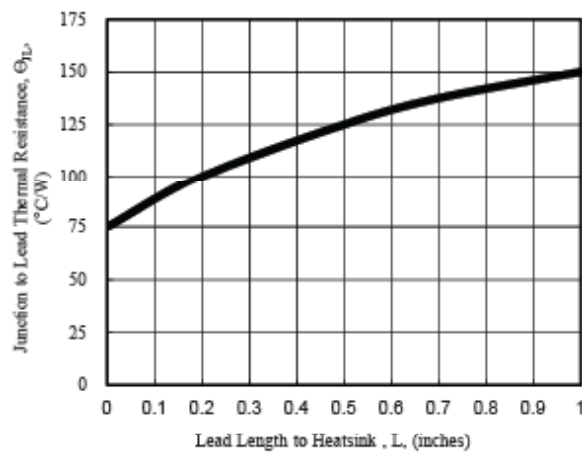


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

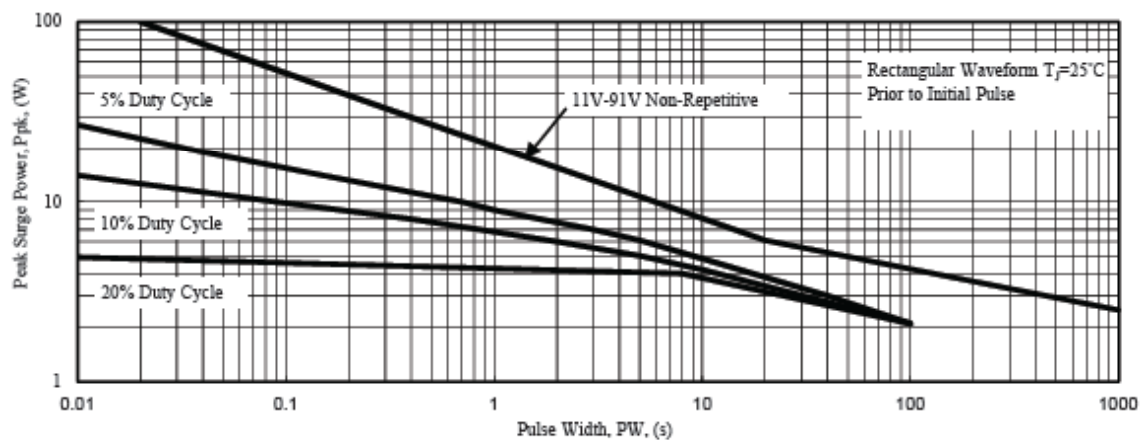


Fig. 4 - Maximum Surge Power

| Part Number | Nominal Zener Voltage @I <sub>T</sub> |                         |                         | I <sub>ZT</sub> (mA) | Maximum Zener Impedance                      |                                              |                      | Maximum Reverse Leakage Current    |                    | Maximum DC Zener Current |
|-------------|---------------------------------------|-------------------------|-------------------------|----------------------|----------------------------------------------|----------------------------------------------|----------------------|------------------------------------|--------------------|--------------------------|
|             | V <sub>Z AVE.</sub> (V)               | V <sub>Z MIN.</sub> (V) | V <sub>Z MAX.</sub> (V) |                      | Z <sub>ZT MAX.</sub> (Ω)<br>@I <sub>ZT</sub> | Z <sub>ZK MAX.</sub> (Ω)<br>@I <sub>ZK</sub> | I <sub>ZK</sub> (mA) | I <sub>R</sub> (μA)@V <sub>R</sub> | V <sub>R</sub> (V) | I <sub>ZM</sub> ( mA )   |
| 1N4728A     | 3.3                                   | 3.14                    | 3.47                    | 76.0                 | 10.0                                         | 400.0                                        | 1.00                 | 100.0                              | 1.0                | 274.0                    |
| 1N4729A     | 3.6                                   | 3.42                    | 3.78                    | 69.0                 | 10.0                                         | 400.0                                        | 1.00                 | 100.0                              | 1.0                | 251.0                    |
| 1N4730A     | 3.9                                   | 3.71                    | 4.10                    | 64.0                 | 9.0                                          | 400.0                                        | 1.00                 | 50.0                               | 1.0                | 232.0                    |
| 1N4731A     | 4.3                                   | 4.09                    | 4.52                    | 58.0                 | 9.0                                          | 400.0                                        | 1.00                 | 10.0                               | 1.0                | 210.0                    |
| 1N4732A     | 4.7                                   | 4.47                    | 4.94                    | 53.0                 | 8.0                                          | 500.0                                        | 1.00                 | 10.0                               | 1.0                | 192.0                    |
| 1N4733A     | 5.1                                   | 4.85                    | 5.36                    | 49.0                 | 7.0                                          | 550.0                                        | 1.00                 | 10.0                               | 1.0                | 177.0                    |
| 1N4734A     | 5.6                                   | 5.32                    | 5.88                    | 45.0                 | 5.0                                          | 600.0                                        | 1.00                 | 10.0                               | 2.0                | 161.0                    |
| 1N4735A     | 6.2                                   | 5.89                    | 6.51                    | 41.0                 | 2.0                                          | 700.0                                        | 1.00                 | 10.0                               | 3.0                | 146.0                    |
| 1N4736A     | 6.8                                   | 6.46                    | 7.14                    | 37.0                 | 3.5                                          | 700.0                                        | 1.00                 | 10.0                               | 4.0                | 133.0                    |
| 1N4737A     | 7.5                                   | 7.13                    | 7.88                    | 34.0                 | 4.0                                          | 700.0                                        | 0.50                 | 10.0                               | 5.0                | 121.0                    |
| 1N4738A     | 8.2                                   | 7.79                    | 8.61                    | 31.0                 | 4.5                                          | 700.0                                        | 0.50                 | 10.0                               | 6.0                | 110.0                    |
| 1N4739A     | 9.1                                   | 8.65                    | 9.56                    | 28.0                 | 5.0                                          | 700.0                                        | 0.50                 | 10.0                               | 7.0                | 100.0                    |
| 1N4740A     | 10.0                                  | 9.50                    | 10.50                   | 25.0                 | 7.0                                          | 700.0                                        | 0.25                 | 10.0                               | 7.6                | 91.0                     |
| 1N4741A     | 11.0                                  | 10.45                   | 11.55                   | 23.0                 | 8.0                                          | 700.0                                        | 0.25                 | 0.5                                | 8.4                | 83.0                     |
| 1N4742A     | 12.0                                  | 11.40                   | 12.60                   | 21.0                 | 9.0                                          | 700.0                                        | 0.25                 | 0.5                                | 9.1                | 76.0                     |
| 1N4743A     | 13.0                                  | 12.35                   | 13.65                   | 19.0                 | 10.0                                         | 700.0                                        | 0.25                 | 0.5                                | 9.9                | 69.0                     |
| 1N4744A     | 15.0                                  | 14.25                   | 15.75                   | 17.0                 | 14.0                                         | 700.0                                        | 0.25                 | 0.5                                | 11.4               | 61.0                     |
| 1N4745A     | 16.0                                  | 15.20                   | 16.80                   | 15.5                 | 16.0                                         | 700.0                                        | 0.25                 | 0.5                                | 12.2               | 57.0                     |
| 1N4746A     | 18.0                                  | 17.10                   | 18.90                   | 14.0                 | 20.0                                         | 750.0                                        | 0.25                 | 0.5                                | 13.7               | 50.0                     |
| 1N4747A     | 20.0                                  | 19.00                   | 21.00                   | 12.5                 | 22.0                                         | 750.0                                        | 0.25                 | 0.5                                | 15.2               | 45.0                     |
| 1N4748A     | 22.0                                  | 20.90                   | 23.10                   | 11.5                 | 23.0                                         | 750.0                                        | 0.25                 | 0.5                                | 16.7               | 41.0                     |
| 1N4749A     | 24.0                                  | 22.80                   | 25.20                   | 10.5                 | 25.0                                         | 750.0                                        | 0.25                 | 0.5                                | 18.2               | 38.0                     |
| 1N4750A     | 27.0                                  | 25.65                   | 28.35                   | 9.5                  | 35.0                                         | 750.0                                        | 0.25                 | 0.5                                | 20.6               | 34.0                     |
| 1N4751A     | 30.0                                  | 28.50                   | 31.50                   | 8.5                  | 40.0                                         | 1000.0                                       | 0.25                 | 0.5                                | 22.8               | 30.0                     |
| 1N4752A     | 33.0                                  | 31.35                   | 34.65                   | 7.5                  | 45.0                                         | 1000.0                                       | 0.25                 | 0.5                                | 25.1               | 27.0                     |
| 1N4753A     | 36.0                                  | 34.20                   | 37.80                   | 7.0                  | 50.0                                         | 1000.0                                       | 0.25                 | 0.5                                | 27.4               | 25.0                     |
| 1N4754A     | 39.0                                  | 37.05                   | 40.95                   | 6.5                  | 60.0                                         | 1000.0                                       | 0.25                 | 0.5                                | 29.7               | 23.0                     |
| 1N4755A     | 43.0                                  | 40.85                   | 45.15                   | 6.0                  | 70.0                                         | 1500.0                                       | 0.25                 | 0.5                                | 32.7               | 22.0                     |
| 1N4756A     | 47.0                                  | 44.65                   | 49.35                   | 5.5                  | 80.0                                         | 1500.0                                       | 0.25                 | 0.5                                | 35.8               | 19.0                     |
| 1N4757A     | 51.0                                  | 48.45                   | 53.55                   | 5.0                  | 95.0                                         | 1500.0                                       | 0.25                 | 0.5                                | 38.8               | 18.0                     |
| 1N4758A     | 56.0                                  | 53.20                   | 58.80                   | 4.5                  | 110.0                                        | 2000.0                                       | 0.25                 | 0.5                                | 42.6               | 16.0                     |
| 1N4759A     | 62.0                                  | 58.90                   | 65.10                   | 4.0                  | 125.0                                        | 2000.0                                       | 0.25                 | 0.5                                | 47.1               | 14.0                     |
| 1N4760A     | 68.0                                  | 64.60                   | 71.40                   | 3.7                  | 150.0                                        | 2000.0                                       | 0.25                 | 0.5                                | 51.7               | 13.0                     |
| 1N4761A     | 75.0                                  | 71.25                   | 78.75                   | 3.3                  | 175.0                                        | 2000.0                                       | 0.25                 | 0.5                                | 56.0               | 12.0                     |
| 1N4762A     | 82.0                                  | 77.90                   | 86.10                   | 3.0                  | 200.0                                        | 3000.0                                       | 0.25                 | 0.5                                | 62.2               | 11.0                     |
| 1N4763A     | 91.0                                  | 86.45                   | 95.55                   | 2.8                  | 250.0                                        | 3000.0                                       | 0.25                 | 0.5                                | 69.2               | 10.0                     |
| 1N4764A     | 100.0                                 | 95.00                   | 105.00                  | 2.5                  | 350.0                                        | 3000.0                                       | 0.25                 | 0.5                                | 76.0               | 9.0                      |
| 1N4765A     | 110.0                                 | 104.50                  | 115.50                  | 2.3                  | 450.0                                        | 4000.0                                       | 0.25                 | 0.1                                | 83.6               | 8.6                      |
| 1N4766A     | 120.0                                 | 114.00                  | 126.00                  | 2.0                  | 550.0                                        | 4500.0                                       | 0.25                 | 0.1                                | 91.2               | 7.8                      |
| 1N4767A     | 130.0                                 | 123.50                  | 136.50                  | 1.9                  | 700.0                                        | 5000.0                                       | 0.25                 | 0.1                                | 98.8               | 7.0                      |
| 1N4768A     | 150.0                                 | 142.50                  | 157.50                  | 1.7                  | 1000.0                                       | 6000.0                                       | 0.25                 | 0.1                                | 114.0              | 6.4                      |
| 1N4769A     | 160.0                                 | 152.00                  | 168.00                  | 1.6                  | 1100.0                                       | 6500.0                                       | 0.25                 | 0.1                                | 121.6              | 5.8                      |
| 1N4770A     | 180.0                                 | 171.00                  | 189.00                  | 1.4                  | 1200.0                                       | 7000.0                                       | 0.25                 | 0.1                                | 136.8              | 5.2                      |
| 1N4771A     | 200.0                                 | 190.00                  | 210.00                  | 1.2                  | 1900.0                                       | 9990.0                                       | 0.25                 | 0.1                                | 152.0              | 4.7                      |