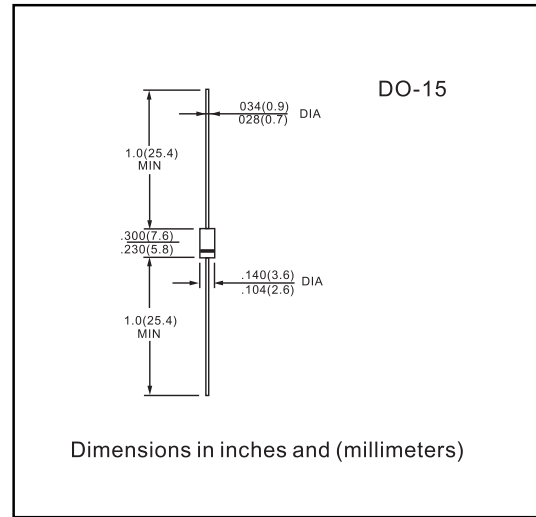


FEATURES :

- * Complete Voltage Range 3.3 to 200 Volts
- * High peak reverse power dissipation
- * High reliability
- * Low leakage current

MECHANICAL DATA

- * Case : DO-15 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.335 gram

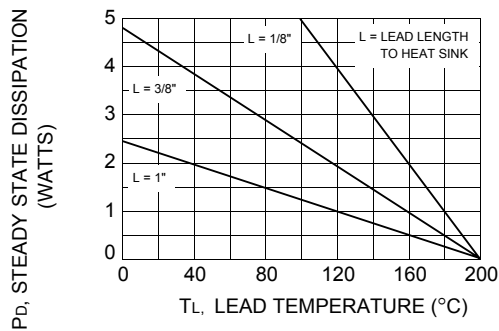


MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

| Rating | Symbol | Value | Unit |
|---|----------------|---------------|-------|
| Maximum Steady state Power Dissipation @ $T_L = 75\text{ }^\circ\text{C}$, Lead Length = 3/8" | P_D | 3.0 | W |
| Derate above 75 °C | | 24 | mW/°C |
| Steady State Power Dissipation @ $T_L = 50\text{ }^\circ\text{C}$, Lead Length = 3/8" | P_D | 1.0 | W |
| Derate above 50 °C | | 6.67 | mW/°C |
| Operating and Storage Temperature Range | T_J, T_{STG} | - 65 to + 200 | °C |

Fig. 1 POWER TEMPERATURE DERATING CURVE

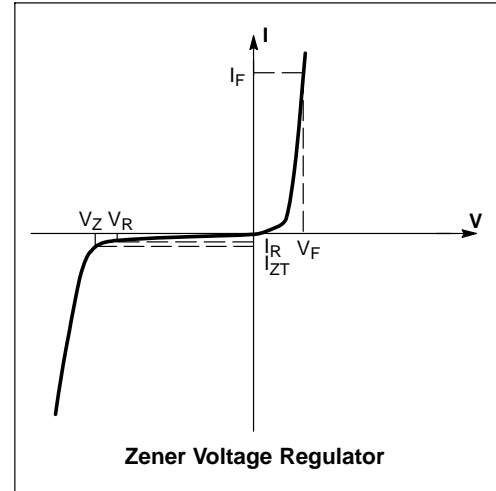




ELECTRICAL CHARACTERISTICS

($T_L = 30^\circ\text{C}$ unless otherwise noted,
 $V_F = 1.5\text{ V Max @ } I_F = 200\text{ mA dc}$ for all types)

| Symbol | Parameter |
|----------|------------------------------------|
| V_Z | Reverse Zener Voltage @ I_{ZT} |
| I_{ZT} | Reverse Current |
| Z_{ZT} | Maximum Zener Impedance @ I_{ZT} |
| I_{ZK} | Reverse Current |
| Z_{ZK} | Maximum Zener Impedance @ I_{ZK} |
| I_R | Reverse Leakage Current @ V_R |
| V_R | Breakdown Voltage |
| I_F | Forward Current |
| V_F | Forward Voltage @ I_F |
| I_{ZM} | Maximum DC Zener Current |



| TYPE 型号 | Zener voltage 齐纳电压 | | Dynamic resistance 动态阻抗 | | | Maximum reverse current 最大反向电流 $T_A=25^\circ\text{C}$ | | Maximum regulator current 最大稳压电流 | Power dissipation 耗散功率 | Package 封装形式 |
|------------|-----------------------|----------|----------------------------|-----------------|----------|---|-----|--|------------------------------|-----------------|
| | $V_Z@I_{ZT}$ | I_{ZT} | $Z_{ZT}@I_{ZT}$ | $Z_{ZK}@I_{ZK}$ | I_{ZK} | $I_R@V_R$ | | I_{ZM} | P_d | |
| | V | mA | Ω | Ω | mA | μA | V | mA | mW | |
| 1N5913 | 3.3 | 113.6 | 10 | 500 | 1.0 | 100 | 1.0 | 454 | 3000 | DO-15 |
| 1N5914 | 3.6 | 104.2 | 9 | 500 | 1.0 | 75 | 1.0 | 416 | 3000 | DO-15 |
| 1N5915 | 3.9 | 96.1 | 7.5 | 500 | 1.0 | 25 | 1.0 | 384 | 3000 | DO-15 |
| 1N5916 | 4.3 | 87.2 | 6 | 500 | 1.0 | 5.0 | 1.0 | 348 | 3000 | DO-15 |
| 1N5917 | 4.7 | 79.8 | 5 | 500 | 1.0 | 5.0 | 1.5 | 319 | 3000 | DO-15 |
| 1N5918 | 5.1 | 73.5 | 4 | 500 | 1.0 | 5.0 | 2.0 | 294 | 3000 | DO-15 |
| 1N5919 | 5.6 | 66.9 | 2 | 500 | 1.0 | 5.0 | 3.0 | 267 | 3000 | DO-15 |
| 1N5920 | 6.2 | 60.5 | 2 | 200 | 1.0 | 5.0 | 4.0 | 241 | 3000 | DO-15 |
| 1N5921 | 6.8 | 55.1 | 2.5 | 200 | 1.0 | 5.0 | 5.2 | 220 | 3000 | DO-15 |
| 1N5922 | 7.5 | 50 | 3 | 400 | 0.5 | 5.0 | 6.0 | 200 | 3000 | DO-15 |
| 1N5923 | 8.2 | 45.7 | 3.5 | 400 | 0.5 | 5.0 | 6.5 | 182 | 3000 | DO-15 |
| 1N5924 | 9.1 | 41.2 | 4 | 500 | 0.5 | 5.0 | 7.0 | 164 | 3000 | DO-15 |
| 1N5925 | 10 | 37.5 | 4.5 | 500 | 0.25 | 5.0 | 8.0 | 150 | 3000 | DO-15 |
| 1N5926 | 11 | 34.1 | 5.5 | 550 | 0.25 | 5.0 | 8.4 | 136 | 3000 | DO-15 |
| 1N5927 | 12 | 31.2 | 6.5 | 550 | 0.25 | 1.0 | 9.1 | 125 | 3000 | DO-15 |
| 1N5928 | 13 | 28.8 | 7 | 550 | 0.25 | 1.0 | 9.9 | 115 | 3000 | DO-15 |



1N5913-1N5956
3000mW

| | | | | | | | | | | |
|--------|-----|------|------|------|------|-----|-------|-----|------|-------|
| 1N5929 | 15 | 25 | 9 | 600 | 0.25 | 1.0 | 11.4 | 100 | 3000 | DO-15 |
| 1N5930 | 16 | 23.4 | 10 | 600 | 0.25 | 1.0 | 12.2 | 93 | 3000 | DO-15 |
| 1N5931 | 18 | 20.8 | 12 | 650 | 0.25 | 1.0 | 13.7 | 83 | 3000 | DO-15 |
| 1N5932 | 20 | 18.7 | 14 | 650 | 0.25 | 1.0 | 15.2 | 75 | 3000 | DO-15 |
| 1N5933 | 22 | 17 | 17.5 | 650 | 0.25 | 1.0 | 16.7 | 68 | 3000 | DO-15 |
| 1N5934 | 24 | 15.6 | 19 | 700 | 0.25 | 1.0 | 18.2 | 62 | 3000 | DO-15 |
| 1N5935 | 27 | 13.9 | 23 | 700 | 0.25 | 1.0 | 20.6 | 55 | 3000 | DO-15 |
| 1N5936 | 30 | 12.5 | 26 | 750 | 0.25 | 1.0 | 22.8 | 50 | 3000 | DO-15 |
| 1N5937 | 33 | 11.4 | 33 | 800 | 0.25 | 1.0 | 25.1 | 45 | 3000 | DO-15 |
| 1N5938 | 36 | 10.4 | 38 | 850 | 0.25 | 1.0 | 27.4 | 41 | 3000 | DO-15 |
| 1N5939 | 39 | 9.6 | 45 | 900 | 0.25 | 1.0 | 29.7 | 38 | 3000 | DO-15 |
| 1N5940 | 43 | 8.7 | 53 | 950 | 0.25 | 1.0 | 32.7 | 34 | 3000 | DO-15 |
| 1N5941 | 47 | 8 | 67 | 1000 | 0.25 | 1.0 | 35.8 | 31 | 3000 | DO-15 |
| 1N5942 | 51 | 7.3 | 70 | 1100 | 0.25 | 1.0 | 38.8 | 29 | 3000 | DO-15 |
| 1N5943 | 56 | 6.7 | 86 | 1300 | 0.25 | 1.0 | 42.6 | 26 | 3000 | DO-15 |
| 1N5944 | 62 | 6 | 100 | 1500 | 0.25 | 1.0 | 47.1 | 24 | 3000 | DO-15 |
| 1N5945 | 68 | 5.5 | 120 | 1700 | 0.25 | 1.0 | 51.7 | 22 | 3000 | DO-15 |
| 1N5946 | 75 | 5 | 140 | 2000 | 0.25 | 1.0 | 56.0 | 20 | 3000 | DO-15 |
| 1N5947 | 82 | 4.6 | 160 | 2500 | 0.25 | 1.0 | 62.2 | 18 | 3000 | DO-15 |
| 1N5948 | 91 | 4.1 | 200 | 3000 | 0.25 | 1.0 | 69.2 | 16 | 3000 | DO-15 |
| 1N5949 | 100 | 3.7 | 250 | 3100 | 0.25 | 1.0 | 76.0 | 15 | 3000 | DO-15 |
| 1N5950 | 110 | 3.4 | 300 | 4000 | 0.25 | 1.0 | 83.6 | 13 | 3000 | DO-15 |
| 1N5951 | 120 | 3.1 | 380 | 4500 | 0.25 | 1.0 | 91.2 | 12 | 3000 | DO-15 |
| 1N5952 | 130 | 2.9 | 450 | 5000 | 0.25 | 1.0 | 98.8 | 11 | 3000 | DO-15 |
| 1N5953 | 150 | 2.5 | 600 | 6000 | 0.25 | 1.0 | 114.0 | 10 | 3000 | DO-15 |
| 1N5954 | 160 | 2.3 | 700 | 6500 | 0.25 | 1.0 | 121.6 | 9 | 3000 | DO-15 |
| 1N5955 | 180 | 2.1 | 900 | 7000 | 0.25 | 1.0 | 136.8 | 8 | 3000 | DO-15 |
| 1N5956 | 200 | 1.9 | 1200 | 8000 | 0.25 | 1.0 | 152.0 | 7 | 3000 | DO-15 |