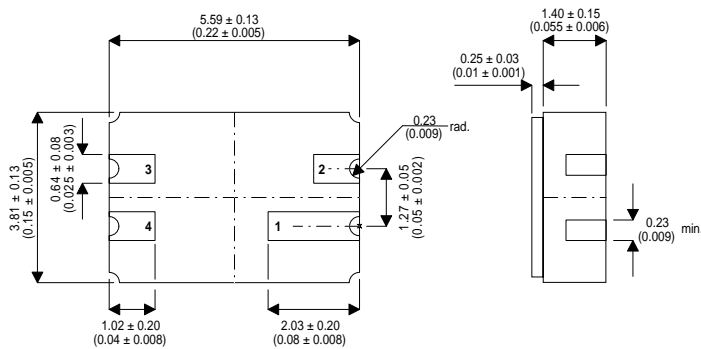


### MECHANICAL DATA

Dimensions in mm (inches)



### ZENER VOLTAGE REGULATOR DIODE IN HERMETIC CERAMIC SURFACE MOUNT PACKAGE FOR HIGH RELIABILITY APPLICATIONS

#### FEATURES

- Military Screening Options available

1 = CATHODE    2 = N/C    3 = N/C    4 = ANODE

### ABSOLUTE MAXIMUM RATINGS

|            |  |               |
|------------|--|---------------|
| $T_{case}$ | Operating temperature Range              | -55 to +175°C |
| $T_{stg}$  | Storage Temperature Range                | -65 to +175°C |
| $P_{TOT}$  | Power Dissipation $T_A = 25^\circ C$     | 500mW         |
| $R_{THJA}$ | Thermal resistance (Junction to Ambient) | 300°C/W       |

### ELECTRICAL CHARACTERISTICS @ 25°C

| Part No. | Nominal<br>Zener Voltage<br>$V_Z @ I_{ZT}$<br>Volts | Test<br>Current<br>$I_{ZT}$<br>mA | Max Zener Impedance       |                                    | Max Reverse Leakage Current |      |          | Max Zener Voltage<br>Temp. Coeff |
|----------|---|-----------------------------------|---------------------------|------------------------------------|-----------------------------|------|----------|----------------------------------|
|          |   |                                   | $Z_{ZT} @ I_{ZT}$<br>Ohms | $Z_{ZK} @ I_{ZK} = 0.25mA$<br>Ohms | $I_R$<br>$\mu A$            | @    |          |                                  |
|          |   |                                   |                           |                                    |                             | A    | B, C & D |                                  |
| 1N5221   | 2.4   | 20                                | 30                        | 1200                               | 100                         | 0.95 | 1.0      | -0.085                           |
| 1N5222   | 2.5   | 20                                | 30                        | 1250                               | 100                         | 0.95 | 1.0      | -0.085                           |
| 1N5223   | 2.7   | 20                                | 30                        | 1300                               | 75                          | 0.95 | 1.0      | -0.080                           |
| 1N5224   | 2.8   | 20                                | 30                        | 1400                               | 75                          | 0.95 | 1.0      | -0.080                           |
| 1N5225   | 3.0   | 20                                | 29                        | 1600                               | 50                          | 0.95 | 1.0      | -0.075                           |
| 1N5226   | 3.3   | 20                                | 28                        | 1600                               | 25                          | 0.95 | 1.0      | -0.070                           |
| 1N5227   | 3.6   | 20                                | 24                        | 1700                               | 15                          | 0.95 | 1.0      | -0.065                           |
| 1N5228   | 3.9   | 20                                | 23                        | 1900                               | 10                          | 0.95 | 1.0      | -0.060                           |
| 1N5229   | 4.3   | 20                                | 22                        | 2000                               | 5.0                         | 0.95 | 1.0      | ± 0.055                          |
| 1N5230   | 4.7   | 20                                | 19                        | 1900                               | 5.0                         | 1.9  | 2.0      | ± 0.030                          |
| 1N5231   | 5.1   | 20                                | 17                        | 1600                               | 5.0                         | 1.9  | 2.0      | ± 0.030                          |
| 1N5232   | 5.6   | 20                                | 11                        | 1600                               | 5.0                         | 2.9  | 3.0      | + 0.038                          |
| 1N5233   | 6.0   | 20                                | 7.0                       | 1600                               | 5.0                         | 3.3  | 3.5      | + 0.038                          |
| 1N5234   | 6.2   | 20                                | 7.0                       | 1000                               | 5.0                         | 3.8  | 4.0      | + 0.045                          |
| 1N5235   | 6.8   | 20                                | 5.0                       | 750                                | 3.0                         | 4.8  | 5.0      | + 0.050                          |

**ELECTRICAL CHARACTERISTICS @ 25°C continued**

| Part No. | Nominal<br>Zener Voltage<br>$V_z @ I_{ZT}$<br>Volts | Test<br>Current<br>$I_{ZT}$<br>mA | Max Zener Impedance       |                                    | Max Reverse Leakage Current |             |          | Max Zener Voltage<br>Temp. Coeff |
|----------|---|-----------------------------------|---------------------------|------------------------------------|-----------------------------|-------------|----------|----------------------------------|
|          |   |                                   | $Z_{ZT} @ I_{ZT}$<br>Ohms | $Z_{ZK} @ I_{ZK} = 0.25mA$<br>Ohms | $I_R$<br>$\mu A$            | $V_R$ Volts |          |                                  |
|          |   |                                   |                           |                                    |                             | @<br>A      | B, C & D |                                  |
| 1N5236   | 7.5   | 20                                | 6.0                       | 500                                | 3.0                         | 5.7         | 6.0      | + 0.058                          |
| 1N5237   | 8.2   | 20                                | 8.0                       | 500                                | 3.0                         | 6.2         | 6.5      | + 0.062                          |
| 1N5238   | 8.7   | 20                                | 8.0                       | 600                                | 3.0                         | 6.2         | 6.5      | + 0.065                          |
| 1N5239   | 9.1   | 20                                | 10                        | 600                                | 3.0                         | 6.7         | 7.0      | + 0.068                          |
| 1N5240   | 10  | 20                                | 17                        | 600                                | 3.0                         | 7.6         | 8.0      | + 0.075                          |
| 1N5241   | 11  | 20                                | 22                        | 600                                | 2.0                         | 8.0         | 8.4      | + 0.076                          |
| 1N5242   | 12  | 20                                | 30                        | 600                                | 1.0                         | 8.7         | 9.1      | + 0.077                          |
| 1N5243   | 13  | 9.5                               | 13                        | 600                                | 0.5                         | 9.4         | 9.9      | + 0.079                          |
| 1N5244   | 14  | 9.0                               | 15                        | 600                                | 0.1                         | 9.5         | 10       | + 0.082                          |
| 1N5245   | 15  | 8.5                               | 16                        | 600                                | 0.1                         | 10.5        | 11       | + 0.082                          |
| 1N5246   | 16  | 7.8                               | 17                        | 600                                | 0.1                         | 11.4        | 12       | + 0.083                          |
| 1N5247   | 17  | 7.4                               | 19                        | 600                                | 0.1                         | 12.4        | 13       | + 0.084                          |
| 1N5248   | 18  | 7.0                               | 21                        | 600                                | 0.1                         | 13.3        | 14       | + 0.085                          |
| 1N5249   | 19  | 6.6                               | 23                        | 600                                | 0.1                         | 13.3        | 14       | + 0.086                          |
| 1N5250   | 20  | 6.2                               | 25                        | 600                                | 0.1                         | 14.3        | 15       | + 0.086                          |
| 1N5251   | 22  | 5.6                               | 29                        | 600                                | 0.1                         | 16.2        | 17       | + 0.087                          |
| 1N5252   | 24  | 5.2                               | 33                        | 600                                | 0.1                         | 17.1        | 18       | + 0.088                          |
| 1N5253   | 25  | 5.0                               | 35                        | 600                                | 0.1                         | 18.1        | 19       | + 0.089                          |
| 1N5254   | 27  | 4.6                               | 41                        | 600                                | 0.1                         | 20          | 21       | + 0.090                          |
| 1N5255   | 28  | 4.5                               | 44                        | 600                                | 0.1                         | 20          | 21       | + 0.091                          |
| 1N5256   | 30  | 4.2                               | 49                        | 600                                | 0.1                         | 22          | 23       | + 0.091                          |
| 1N5257   | 33  | 3.8                               | 58                        | 700                                | 0.1                         | 24          | 25       | + 0.092                          |
| 1N5258   | 36  | 3.4                               | 70                        | 700                                | 0.1                         | 26          | 27       | + 0.093                          |
| 1N5259   | 39  | 3.2                               | 80                        | 800                                | 0.1                         | 29          | 30       | + 0.094                          |
| 1N5260   | 43  | 3.0                               | 93                        | 900                                | 0.1                         | 31          | 33       | + 0.095                          |
| 1N5261   | 47  | 2.7                               | 105                       | 1000                               | 0.1                         | 34          | 36       | + 0.095                          |
| 1N5262   | 51  | 2.5                               | 125                       | 1100                               | 0.1                         | 37          | 39       | + 0.096                          |
| 1N5263   | 56  | 2.2                               | 150                       | 1300                               | 0.1                         | 41          | 43       | + 0.096                          |
| 1N5264   | 60  | 2.1                               | 170                       | 1400                               | 0.1                         | 44          | 46       | + 0.097                          |
| 1N5265   | 62  | 2.0                               | 185                       | 1400                               | 0.1                         | 45          | 47       | + 0.097                          |
| 1N5266   | 68  | 1.8                               | 230                       | 1600                               | 0.1                         | 49          | 52       | + 0.097                          |
| 1N5267   | 75  | 1.7                               | 270                       | 1700                               | 0.1                         | 53          | 56       | + 0.098                          |
| 1N5268   | 82  | 1.5                               | 330                       | 2000                               | 0.1                         | 59          | 62       | + 0.098                          |
| 1N5269   | 87  | 1.4                               | 370                       | 2200                               | 0.1                         | 65          | 68       | + 0.099                          |
| 1N5270   | 91  | 1.4                               | 400                       | 2300                               | 0.1                         | 66          | 69       | + 0.099                          |
| 1N5271   | 100   | 1.3                               | 500                       | 2600                               | 0.1                         | 72          | 76       | + 0.110                          |
| 1N5272   | 110   | 1.1                               | 750                       | 3000                               | 0.1                         | 80          | 84       | + 0.110                          |
| 1N5273   | 120   | 1.0                               | 900                       | 4000                               | 0.1                         | 86          | 91       | + 0.110                          |
| 1N5274   | 130   | 0.95                              | 1100                      | 4500                               | 0.1                         | 94          | 99       | + 0.110                          |
| 1N5275   | 140   | 0.90                              | 1300                      | 4500                               | 0.1                         | 101         | 106      | + 0.110                          |
| 1N5276   | 150   | 0.85                              | 1500                      | 5000                               | 0.1                         | 108         | 114      | + 0.110                          |
| 1N5277   | 160   | 0.80                              | 1700                      | 5500                               | 0.1                         | 116         | 122      | + 0.110                          |
| 1N5278   | 170   | 0.74                              | 1900                      | 5500                               | 0.1                         | 123         | 129      | + 0.110                          |
| 1N5279   | 180   | 0.68                              | 2200                      | 6000                               | 0.1                         | 130         | 137      | + 0.110                          |
| 1N5280   | 190   | 0.66                              | 2400                      | 6500                               | 0.1                         | 137         | 144      | + 0.110                          |
| 1N5281   | 200   | 0.65                              | 2500                      | 7000                               | 0.1                         | 144         | 152      | + 0.110                          |