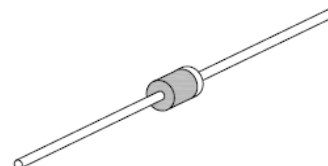


## 1.5W Zener Diodes

### Features

- Low Profile Package
- 1.5W Power Dissipation
- Built-in Strain Relief
- Low Inductance
- High Stability
- Zener Voltage from 3.3V to 56V
- RoHS Compliant



DO-41



### Mechanical Data

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| <b>Case:</b>      | DO-41, Molded plastic over passivated junction           |
| <b>Terminals:</b> | Axial leads, solderable per MIL-STD-750, Method 2026     |
| <b>Epoxy:</b>     | Plastic package has UL flammability classification 94V-0 |
| <b>Polarity:</b>  | Color band denotes cathode end                           |
| <b>Weight:</b>    | 0.012 ounce, 0.3 gram                                    |

### Maximum Ratings *(T<sub>Ambient</sub>=25°C unless noted otherwise)*

| Symbol                                | Description                                                                                  | Value       | Unit | Conditions |
|---------------------------------------|----------------------------------------------------------------------------------------------|-------------|------|------------|
| <b>P<sub>D</sub></b>                  | DC Power Dissipation on T <sub>A</sub> =75°C, Measure at Zero Lead Length Derate above 75° C | 1.5         | W    | Note       |
| <b>T<sub>J</sub>, T<sub>STG</sub></b> | Operating Junction and Storage Temperature Range                                             | -50 to +150 | ° C  |            |

**Note:** Mounted on 5.0mm<sup>2</sup> (.013mm thick) land areas.

# 1.5W Zener Diodes

## 1N5913B - 1N5943B

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

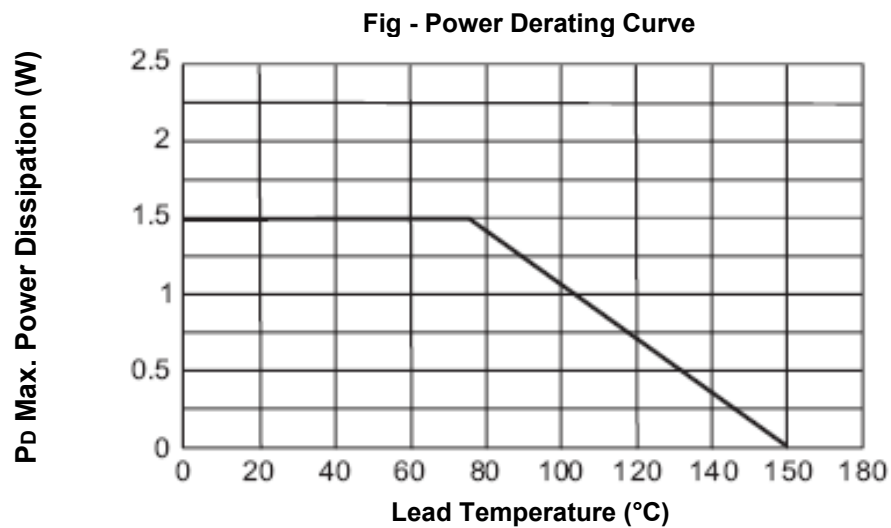
| P/N     | Normal Zener Voltage |         |         |          | Maximum Zener Impedance |           |      | Maximum Reverse Leakage Current |      |
|---------|----------------------|---------|---------|----------|-------------------------|-----------|------|---------------------------------|------|
|         | VZ @ IZT             |         |         |          | ZZT @ IZT               | Zzk @ Izk |      | IR @ VR                         |      |
|         | Nom. VZ              | Min. VZ | Max. VZ | IZT (mA) | $\Omega$                | $\Omega$  | mA   | $\mu A$                         | VR   |
| 1N5913B | 3.3                  | 3.14    | 3.47    | 113.6    | 10                      | 500       | 1.0  | 50                              | 1.0  |
| 1N5914B | 3.6                  | 3.42    | 3.78    | 104.2    | 9                       | 500       | 1.0  | 35.5                            | 1.0  |
| 1N5915B | 3.9                  | 3.71    | 4.10    | 96.1     | 7.5                     | 500       | 1.0  | 12.5                            | 1.0  |
| 1N5916B | 4.3                  | 4.09    | 4.52    | 87.2     | 6                       | 500       | 1.0  | 2.5                             | 1.0  |
| 1N5917B | 4.7                  | 4.47    | 4.94    | 79.8     | 5                       | 500       | 1.0  | 2.5                             | 1.5  |
| 1N5918B | 5.1                  | 4.85    | 5.36    | 73.5     | 4                       | 350       | 1.0  | 2.5                             | 2.0  |
| 1N5919B | 5.6                  | 5.32    | 5.88    | 66.9     | 2                       | 250       | 1.0  | 2.5                             | 3.0  |
| 1N5920B | 6.2                  | 5.89    | 6.51    | 60.5     | 2                       | 200       | 1.0  | 2.5                             | 4.0  |
| 1N5921B | 6.8                  | 6.46    | 7.14    | 55.1     | 2.5                     | 200       | 1.0  | 2.5                             | 5.2  |
| 1N5922B | 7.5                  | 7.13    | 7.88    | 50.0     | 3                       | 400       | 0.5  | 2.5                             | 6.0  |
| 1N5923B | 8.2                  | 7.79    | 8.61    | 45.7     | 3.5                     | 400       | 0.5  | 2.5                             | 6.5  |
| 1N5924B | 9.1                  | 8.65    | 9.56    | 41.2     | 4                       | 500       | 0.5  | 2.5                             | 7.0  |
| 1N5925B | 10                   | 9.50    | 10.50   | 37.5     | 4.5                     | 500       | 0.25 | 2.5                             | 8.0  |
| 1N5926B | 11                   | 10.45   | 11.55   | 34.1     | 5.5                     | 550       | 0.25 | 0.5                             | 8.4  |
| 1N5927B | 12                   | 11.40   | 12.60   | 31.2     | 6.5                     | 550       | 0.25 | 0.5                             | 9.1  |
| 1N5928B | 13                   | 12.35   | 13.65   | 28.8     | 7                       | 550       | 0.25 | 0.5                             | 9.9  |
| 1N5929B | 15                   | 14.25   | 15.75   | 25.0     | 9                       | 600       | 0.25 | 0.5                             | 11.4 |
| 1N5930B | 16                   | 15.20   | 16.80   | 23.4     | 10                      | 600       | 0.25 | 0.5                             | 12.2 |
| 1N5931B | 18                   | 17.10   | 18.90   | 20.8     | 12                      | 650       | 0.25 | 0.5                             | 13.7 |
| 1N5932B | 20                   | 19.00   | 21.00   | 18.7     | 14                      | 650       | 0.25 | 0.5                             | 15.2 |
| 1N5933B | 22                   | 20.90   | 23.10   | 17.0     | 17.5                    | 650       | 0.25 | 0.5                             | 16.7 |
| 1N5934B | 24                   | 22.80   | 25.20   | 15.6     | 19                      | 700       | 0.25 | 0.5                             | 18.2 |
| 1N5935B | 27                   | 25.65   | 28.35   | 13.9     | 23                      | 700       | 0.25 | 0.5                             | 20.6 |
| 1N5936B | 30                   | 28.50   | 31.50   | 12.5     | 26                      | 750       | 0.25 | 0.5                             | 22.8 |
| 1N5937B | 33                   | 31.35   | 34.65   | 11.4     | 33                      | 800       | 0.25 | 0.5                             | 25.1 |
| 1N5938B | 36                   | 34.20   | 37.80   | 10.4     | 38                      | 850       | 0.25 | 0.5                             | 27.4 |
| 1N5939B | 39                   | 37.05   | 40.95   | 9.6      | 45                      | 900       | 0.25 | 0.5                             | 29.7 |
| 1N5940B | 43                   | 40.85   | 45.15   | 8.7      | 53                      | 950       | 0.25 | 0.5                             | 32.7 |

## 1.5W Zener Diodes

### 1N5913B - 1N5943B

| P/N     | Normal Zener Voltage |         |         |          | Maximum Zener Impedance |           |      | Maximum Reverse Leakage Current |      |
|---------|----------------------|---------|---------|----------|-------------------------|-----------|------|---------------------------------|------|
|         | VZ @ IZT             |         |         |          | ZZT @ IZT               | Zzk @ Izk |      | IR @ VR                         |      |
|         | Nom. VZ              | Min. VZ | Max. VZ | IZT (mA) | $\Omega$                | $\Omega$  | mA   | $\mu$ A                         | VR   |
| 1N5941B | 47                   | 44.65   | 49.35   | 8.0      | 67                      | 1000      | 0.25 | 0.5                             | 35.8 |
| 1N5942B | 51                   | 48.45   | 53.55   | 7.3      | 70                      | 1100      | 0.25 | 0.5                             | 38.8 |
| 1N5943B | 56                   | 53.20   | 58.80   | 6.7      | 86                      | 1300      | 0.25 | 0.5                             | 42.6 |

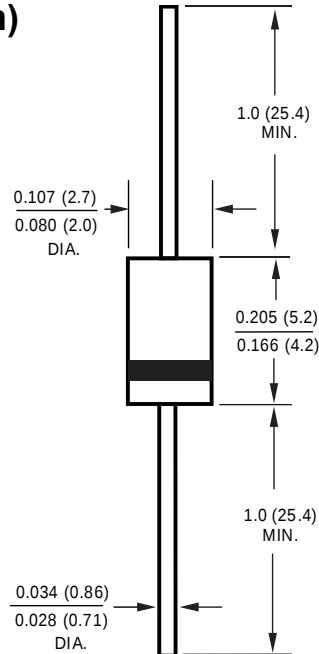
### Characteristics Curves



## 1.5W Zener Diodes

### 1N5913B - 1N5943B

#### Dimensions in inches (mm)



#### DO-41

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