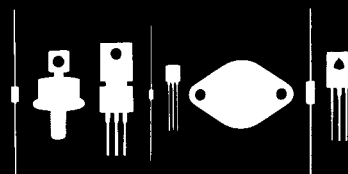


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145 Adams Avenue  
Hauppauge, New York 11788



1N957B THRU 1N992B  
500 mW ZENER DIODE  
6.8 VOLTS to 200 VOLTS  
5% TOLERANCE

JEDEC DO-35\* CASE

## DESCRIPTION

The Central Semiconductor 1N957B Series Silicon Zener Diode is a high quality voltage regulator for use in industrial, commercial, entertainment and computer applications.

## ABSOLUTE MAXIMUM RATINGS

Power Dissipation (@  $T_L = 75^\circ\text{C}$ )  
Operating and Storage Temperature  
Tolerance "B Suffix"  
Tolerance "C Suffix"  
Tolerance "D Suffix"

## SYMBOL

$P_D$  500  
 $T_J, T_{STG}$  -65 to +200  
 $\pm 5$   
 $\pm 2$   
 $\pm 1$

## UNIT

mW  
 $^\circ\text{C}$   
%  
%  
%

ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ ),  $V_F = 1.5\text{V MAX @ } I_F = 200\text{ mA}$  FOR ALL TYPES.

| TYPE   | Zener Voltage  | Test Current | Maximum Zener Impedance |                   |      | Maximum Reverse Current |       | Maximum Zener Current |
|--------|----------------|--------------|-------------------------|-------------------|------|-------------------------|-------|-----------------------|
|        | $V_Z @ I_{ZT}$ | $I_{ZT}$     | $Z_{ZT} @ I_{ZT}$       | $Z_{ZK} @ I_{ZK}$ |      | $I_R @ V_R$             |       | $I_{ZM}$              |
|        | Volts          | mA           | $\Omega$                | $\Omega$          | mA   | $\mu\text{A}$           | Volts | mA                    |
| 1N957B | 6.8            | 18.5         | 4.5                     | 700               | 1.0  | 150                     | 5.2   | 47                    |
| 1N958B | 7.5            | 16.5         | 5.5                     | 700               | 0.5  | 75                      | 5.7   | 42                    |
| 1N959B | 8.2            | 15           | 6.5                     | 700               | 0.5  | 50                      | 6.2   | 38                    |
| 1N960B | 9.1            | 14           | 7.5                     | 700               | 0.5  | 25                      | 6.9   | 35                    |
| 1N961B | 10             | 12.5         | 8.5                     | 700               | 0.25 | 10                      | 7.6   | 32                    |
| 1N962B | 11             | 11.5         | 9.5                     | 700               | 0.25 | 5.0                     | 8.4   | 28                    |
| 1N963B | 12             | 10.5         | 11.5                    | 700               | 0.25 | 5.0                     | 9.1   | 26                    |
| 1N964B | 13             | 9.5          | 13                      | 700               | 0.25 | 5.0                     | 9.9   | 24                    |
| 1N965B | 15             | 8.5          | 16                      | 700               | 0.25 | 5.0                     | 11.4  | 21                    |
| 1N966B | 16             | 7.8          | 17                      | 700               | 0.25 | 5.0                     | 12.2  | 19                    |
| 1N967B | 18             | 7.0          | 21                      | 750               | 0.25 | 5.0                     | 13.7  | 17                    |
| 1N968B | 20             | 6.2          | 25                      | 750               | 0.25 | 5.0                     | 15.2  | 15                    |
| 1N969B | 22             | 5.6          | 29                      | 750               | 0.25 | 5.0                     | 16.7  | 14                    |
| 1N970B | 24             | 5.2          | 33                      | 750               | 0.25 | 5.0                     | 18.2  | 13                    |
| 1N971B | 27             | 4.6          | 41                      | 750               | 0.25 | 5.0                     | 20.6  | 11                    |
| 1N972B | 30             | 4.2          | 49                      | 1000              | 0.25 | 5.0                     | 22.8  | 10                    |
| 1N973B | 33             | 3.8          | 58                      | 1000              | 0.25 | 5.0                     | 25.1  | 9.2                   |
| 1N974B | 36             | 3.4          | 70                      | 1000              | 0.25 | 5.0                     | 27.4  | 8.5                   |
| 1N975B | 39             | 3.2          | 80                      | 1000              | 0.25 | 5.0                     | 29.7  | 7.8                   |
| 1N976B | 43             | 3.0          | 93                      | 1500              | 0.25 | 5.0                     | 32.7  | 7.0                   |
| 1N977B | 47             | 2.7          | 105                     | 1500              | 0.25 | 5.0                     | 35.8  | 6.4                   |
| 1N978B | 51             | 2.5          | 125                     | 2000              | 0.25 | 5.0                     | 38.8  | 5.9                   |
| 1N979B | 56             | 2.2          | 150                     | 2000              | 0.25 | 5.0                     | 42.6  | 5.4                   |
| 1N980B | 62             | 2.0          | 185                     | 2000              | 0.25 | 5.0                     | 47.1  | 4.9                   |
| 1N981B | 68             | 1.8          | 230                     | 2000              | 0.25 | 5.0                     | 51.7  | 4.5                   |
| 1N982B | 75             | 1.7          | 270                     | 2000              | 0.25 | 5.0                     | 56    | 1.0                   |
| 1N983B | 82             | 1.5          | 330                     | 3000              | 0.25 | 5.0                     | 62.2  | 3.7                   |
| 1N984B | 91             | 1.4          | 400                     | 3000              | 0.25 | 5.0                     | 69.2  | 3.3                   |
| 1N985B | 100            | 1.3          | 500                     | 3000              | 0.25 | 5.0                     | 76    | 3.0                   |
| 1N986B | 110            | 1.1          | 750                     | 4000              | 0.25 | 5.0                     | 83.6  | 2.7                   |
| 1N987B | 120            | 1.0          | 900                     | 4500              | 0.25 | 5.0                     | 91.2  | 2.5                   |
| 1N988B | 130            | 0.95         | 1100                    | 5000              | 0.25 | 5.0                     | 98.8  | 2.3                   |
| 1N989B | 150            | 0.85         | 1500                    | 6000              | 0.25 | 5.0                     | 114   | 2.0                   |
| 1N990B | 160            | 0.80         | 1700                    | 6500              | 0.25 | 5.0                     | 121.6 | 1.9                   |
| 1N991B | 180            | 0.68         | 2200                    | 7100              | 0.25 | 5.0                     | 136.8 | 1.7                   |
| 1N992B | 200            | 0.65         | 2500                    | 8000              | 0.25 | 5.0                     | 152   | 1.5                   |

\*1N985B thru 1N992B may be supplied in an Epoxy DO-7 Case.

145 Adams Avenue, Hauppauge, NY 11788 USA  
Tel: (631) 435-1110 • Fax: (631) 435-1824