

CentralTM Semiconductor Corp.

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

Manufacturers of World Class Discrete Semiconductors

1N746A THRU 1N759A

500 mW ZENER DIODE
3.3 VOLTS to 12 VOLTS
5% TOLERANCE

JEDEC DO-35 CASE

DESCRIPTION

The Central Semiconductor 1N746A 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 "A Suffix"
Tolerance "C Suffix"
Tolerance "D Suffix"

SYMBOL

P_D 500
 T_J, T_{STG} -65 to +200
 ± 5
 ± 2
 ± 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 $V_Z @ I_{ZT}$ | Test Current I_{ZT} | Maximum Zener Impedance $Z_{ZT} @ I_{ZT}$ | Maximum Reverse Leakage Current | | | | Maximum Zener Current I_{ZM} |
|--------|---------------------------------|--------------------------|--|---------------------------------|-------|--|-------|-----------------------------------|
| | | | | $I_R @ V_R$ | | $I_R @ V_R$ $T_A = 150^\circ\text{C}$ | | |
| | | | | μA | Volts | μA | Volts | |
| 1N746A | 3.3 | 20 | 28 | 10 | 1.0 | 30 | 1.0 | 110 |
| 1N747A | 3.6 | 20 | 24 | 10 | 1.0 | 30 | 1.0 | 100 |
| 1N748A | 3.9 | 20 | 23 | 10 | 1.0 | 30 | 1.0 | 95 |
| 1N749A | 4.3 | 20 | 22 | 2.0 | 1.0 | 30 | 1.0 | 85 |
| 1N750A | 4.7 | 20 | 19 | 2.0 | 1.0 | 30 | 1.0 | 75 |
| 1N751A | 5.1 | 20 | 17 | 1.0 | 1.0 | 20 | 1.0 | 70 |
| 1N752A | 5.6 | 20 | 11 | 1.0 | 1.0 | 20 | 1.0 | 65 |
| 1N753A | 6.2 | 20 | 7.0 | 0.1 | 1.0 | 20 | 1.0 | 60 |
| 1N754A | 6.8 | 20 | 5.0 | 0.1 | 1.0 | 20 | 1.0 | 55 |
| 1N755A | 7.5 | 20 | 6.0 | 0.1 | 1.0 | 20 | 1.0 | 50 |
| 1N756A | 8.2 | 20 | 8.0 | 0.1 | 1.0 | 20 | 1.0 | 45 |
| 1N757A | 9.1 | 20 | 10 | 0.1 | 1.0 | 20 | 1.0 | 40 |
| 1N758A | 10 | 20 | 17 | 0.1 | 1.0 | 20 | 1.0 | 35 |
| 1N759A | 12 | 20 | 30 | 0.1 | 1.0 | 20 | 1.0 | 30 |