**1N746A THRU 1N759A**

**SILICON ZENER DIODES**
**500mW, 3.3 THRU 12 VOLT**
**5% TOLERANCE**



**DO-35 CASE**

Central Semiconductor Corp.

www.centralsemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 1N746A series silicon Zener diode is a highly reliable voltage regulator designed for use in industrial, commercial, entertainment and computer applications.

**MARKING: Devices shall either be marked with the prefix 'C' followed by the full part number or by the marking code in the Electrical Characteristics Table.**

| **MAXIMUM RATINGS:** ($T_L$=75°C) | **SYMBOL** | | **UNITS** |
|---|---|---|---|
| Power Dissipation | $P_D$ | 500 | mW |
| Operating and Storage Junction Temperature | $T_J$, $T_{stg}$ | -65 to +200 | °C |

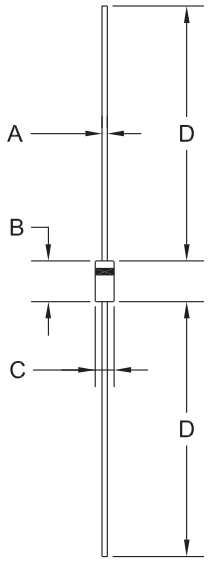
**ELECTRICAL CHARACTERISTICS:** ($T_A$=25°C) $V_F$=1.5V MAX @ $I_F$=200mA (for all types)

| Type | Zener Voltage $V_Z$ @ $I_{ZT}$ | | | Test Current | Maximum Zener Impedance | Maximum Reverse Leakage Current | | Maximum Reverse Leakage Current @ $T_A$=150°C | | Maximum Regulator Current | Marking Code |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MIN | NOM | MAX | $I_{ZT}$ | $Z_{ZT}$ @ $I_{ZT}$ | $I_R$ @ | $V_R$ | $I_R$ @ | $V_R$ | $I_{ZM}$ | |
| | V | V | V | mA | Ω | μA | V | μA | V | mA | |
| 1N746A | 3.135 | 3.3 | 3.465 | 20 | 28 | 10 | 1.0 | 30 | 1.0 | 110 | C746A |
| 1N747A | 3.420 | 3.6 | 3.780 | 20 | 24 | 10 | 1.0 | 30 | 1.0 | 100 | C747A |
| 1N748A | 3.705 | 3.9 | 4.095 | 20 | 23 | 10 | 1.0 | 30 | 1.0 | 95 | C748A |
| 1N749A | 4.085 | 4.3 | 4.515 | 20 | 22 | 2.0 | 1.0 | 30 | 1.0 | 85 | C749A |
| 1N750A | 4.465 | 4.7 | 4.935 | 20 | 19 | 2.0 | 1.0 | 30 | 1.0 | 75 | C750A |
| 1N751A | 4.845 | 5.1 | 5.355 | 20 | 17 | 1.0 | 1.0 | 20 | 1.0 | 70 | C751A |
| 1N752A | 5.320 | 5.6 | 5.880 | 20 | 11 | 1.0 | 1.0 | 20 | 1.0 | 65 | C752A |
| 1N753A | 5.890 | 6.2 | 6.510 | 20 | 7.0 | 0.1 | 1.0 | 20 | 1.0 | 60 | C753A |
| 1N754A | 6.460 | 6.8 | 7.140 | 20 | 5.0 | 0.1 | 1.0 | 20 | 1.0 | 55 | C754A |
| 1N755A | 7.125 | 7.5 | 7.875 | 20 | 6.0 | 0.1 | 1.0 | 20 | 1.0 | 50 | C755A |
| 1N756A | 7.790 | 8.2 | 8.610 | 20 | 8.0 | 0.1 | 1.0 | 20 | 1.0 | 45 | C756A |
| 1N757A | 8.645 | 9.1 | 9.555 | 20 | 10 | 0.1 | 1.0 | 20 | 1.0 | 40 | C757A |
| 1N758A | 9.50 | 10 | 10.50 | 20 | 17 | 0.1 | 1.0 | 20 | 1.0 | 35 | C758A |
| 1N759A | 11.40 | 12 | 12.60 | 20 | 30 | 0.1 | 1.0 | 20 | 1.0 | 30 | C759A |

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## DO-35 CASE - MECHANICAL OUTLINE




R1

| DIMENSIONS | | | | |
|---|---|---|---|---|
| | INCHES | | MILLIMETERS | |
| SYMBOL | MIN | MAX | MIN | MAX |
| A | 0.018 | 0.022 | 0.46 | 0.56 |
| B | 0.120 | 0.200 | 3.05 | 5.08 |
| C | 0.060 | 0.090 | 1.52 | 2.29 |
| D | 1.000 | - | 25.40 | - |

DO-35 (REV: R1)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES

### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

### CONTACT US

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