

1N4614 THRU 1N4627

SILICON ZENER DIODE
LOW NOISE
1.8 VOLT THRU 6.2 VOLT
250mW, 5% TOLERANCE

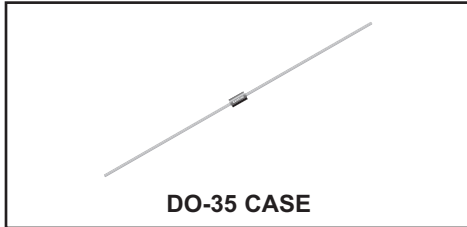


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DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1N4614 series silicon Zener diode is designed for low leakage, low current, and low noise applications. Higher voltage devices are available in the 1N4099 series.

MARKING: FULL PART NUMBER



DO-35 CASE

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Power Dissipation

Operating and Storage Junction Temperature

SYMBOL

P_D

T_J, T_{stg}

250

-65 to +200

UNITS

mW

$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$) $V_F=1.0\text{V MAX @ } I_F=200\text{mA}$ (for all types)

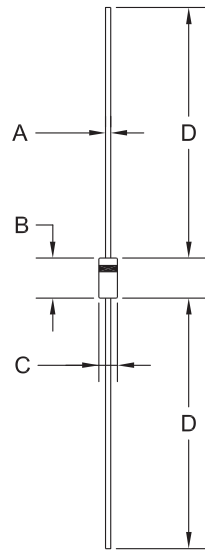
| TYPE | ZENER VOLTAGE $V_Z @ I_{ZT}$ | | | TEST CURRENT | MAXIMUM ZENER IMPEDANCE | MAXIMUM REVERSE CURRENT | | MAXIMUM ZENER CURRENT | MAXIMUM NOISE DENSITY |
|--------|---------------------------------|-----|-------|---------------|-------------------------|-------------------------|-----|-----------------------|--------------------------------|
| | MIN | NOM | MAX | I_{ZT} | $Z_{ZT} @ I_{ZT}$ | $I_R @ V_R$ | | I_{ZM} | $N_D @ 250\mu\text{A}$ |
| | V | V | V | μA | Ω | μA | V | mA | $\mu\text{V}/\sqrt{\text{Hz}}$ |
| 1N4614 | 1.710 | 1.8 | 1.890 | 250 | 1200 | 7.5 | 1.0 | 120 | 1.0 |
| 1N4615 | 1.900 | 2.0 | 2.100 | 250 | 1250 | 5.0 | 1.0 | 110 | 1.0 |
| 1N4616 | 2.090 | 2.2 | 2.310 | 250 | 1300 | 4.0 | 1.0 | 100 | 1.0 |
| 1N4617 | 2.280 | 2.4 | 2.520 | 250 | 1400 | 2.0 | 1.0 | 95 | 1.0 |
| 1N4618 | 2.565 | 2.7 | 2.835 | 250 | 1500 | 1.0 | 1.0 | 90 | 1.0 |
| 1N4619 | 2.850 | 3.0 | 3.150 | 250 | 1600 | 0.8 | 1.0 | 85 | 1.0 |
| 1N4620 | 3.135 | 3.3 | 3.465 | 250 | 1650 | 7.5 | 1.5 | 80 | 1.0 |
| 1N4621 | 3.420 | 3.6 | 3.780 | 250 | 1700 | 7.5 | 2.0 | 75 | 1.0 |
| 1N4622 | 3.705 | 3.9 | 4.095 | 250 | 1650 | 5.0 | 2.0 | 70 | 1.0 |
| 1N4623 | 4.085 | 4.3 | 4.515 | 250 | 1600 | 4.0 | 2.0 | 65 | 1.0 |
| 1N4624 | 4.465 | 4.7 | 4.935 | 250 | 1550 | 10 | 3.0 | 60 | 1.0 |
| 1N4625 | 4.845 | 5.1 | 5.355 | 250 | 1500 | 10 | 3.0 | 55 | 2.0 |
| 1N4626 | 5.320 | 5.6 | 5.880 | 250 | 1400 | 10 | 4.0 | 50 | 4.0 |
| 1N4627 | 5.890 | 6.2 | 6.510 | 250 | 1200 | 10 | 5.0 | 45 | 5.0 |

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250mW, 5% TOLERANCE



DO-35 CASE - MECHANICAL OUTLINE



R1

| SYMBOL | INCHES | | MILLIMETERS | |
|--------|--------|-------|-------------|------|
| | 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)

MARKING: FULL PART NUMBER

R3 (1-May 2013)

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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