

500mW Zener

Qualified per MIL-PRF-19500/533

DESCRIPTION:

This voidless hermetically sealed zener is military qualified per MIL-PRF-19500/533 and is targeted for space, commercial and military aircraft, military vehicles, shipboard markets and all high reliability applications.

FEATURES / BENEFITS:

- ✓ Hermetic, non-cavity glass package
- ✓ Category I Metallurgically bonded
- ✓ All devices are 100% hot solder dipped
- ✓ JAN/ JANTX/JANTXV available per MIL-PRF-19500/533

MAXIMUM RATINGS

- ✓ All ratings are @ Tc = 25 °C unless otherwise specified
- ✓ Operating -55 °C to +175 °C and storage -65 °C to +175 °C

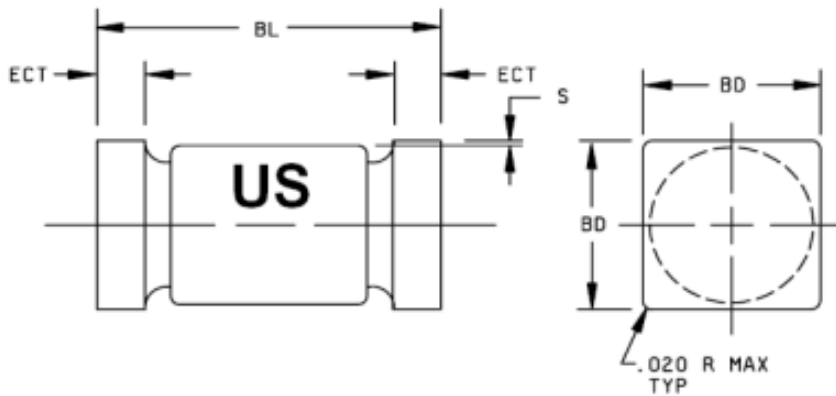
| Type | VZ2 nom at IZ2 | VZ1 IZ1 250 µA | IZ2 test current | ZZT at IZ2 | ZZK at 250 µA | IZM | VZ(reg) | VR | IR1 at +25°C | IR2 at TA = +150°C | αvz |
|----------|----------------------|----------------------|------------------------|------------------|---------------------|-----|---------|------|--------------------|--------------------------|-------|
| | V | minV | mA | Ω | Ω | mA | V | V | µA | µA | %/°C |
| 1N6325US | 11.0 | 10.0 | 20 | 7 | 550 | 39 | 0.50 | 8.5 | 1.00 | 10 | +0.82 |
| 1N6326US | 12.0 | 11.0 | 20 | 7 | 550 | 35 | 0.55 | 9.0 | 1.00 | 10 | +0.83 |
| 1N6327US | 13.0 | 11.9 | 9.5 | 8 | 550 | 33 | 0.55 | 9.9 | 0.05 | 10 | +0.83 |
| 1N6328US | 15.0 | 13.8 | 8.5 | 10 | 600 | 28 | 0.70 | 11.0 | 0.05 | 10 | +0.84 |
| 1N6329US | 16.0 | 14.7 | 7.8 | 12 | 600 | 27 | 0.75 | 12.0 | 0.05 | 10 | +0.84 |
| 1N6330US | 18.0 | 16.6 | 7.0 | 14 | 600 | 24 | 0.85 | 14.0 | 0.05 | 10 | +0.85 |
| 1N6331US | 20.0 | 18.5 | 6.2 | 18 | 500 | 21 | 0.95 | 15.0 | 0.05 | 10 | +0.86 |
| 1N6332US | 22.0 | 20.4 | 5.6 | 20 | 500 | 19 | 1.05 | 17.0 | 0.05 | 10 | +0.87 |

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ELECTRICAL CHARACTERISTICS

| Type | VZ2 nom at IZ2 | VZ1 IZ1 250 μ A | IZ2 test current | ZZT at IZ2 | ZZK at 250 μ A | IZM | VZ(reg) | VR | IR1 at +25° C | IR2 at TA = +150°C | α vz |
|----------|----------------------|---------------------------|------------------------|------------------|--------------------------|------|---------|------|------------------------|--------------------------|-------------|
| | V | minV | mA | Ω | Ω | mA | V | V | μ A | μ A | %/°C |
| 1N6333US | 24.0 | 22.3 | 5.2 | 24 | 500 | 18 | 1.15 | 18.0 | 0.05 | 10 | +0.088 |
| 1N6334US | 27.0 | 25.2 | 4.6 | 27 | 500 | 16 | 1.30 | 21.0 | 0.05 | 10 | +0.090 |
| 1N6335US | 30.0 | 28.0 | 4.2 | 32 | 500 | 14 | 1.45 | 23.0 | 0.05 | 10 | +0.091 |
| 1N6336US | 33.0 | 30.9 | 3.8 | 40 | 600 | 13 | 1.60 | 25.0 | 0.05 | 10 | +0.092 |
| 1N6337US | 36.0 | 33.7 | 3.4 | 50 | 600 | 12.0 | 1.75 | 27.0 | 0.05 | 10 | +0.093 |
| 1N6338US | 39.0 | 36.6 | 3.2 | 55 | 700 | 11.0 | 1.90 | 30 | 0.05 | 10 | +0.094 |
| 1N6339US | 43.0 | 40.4 | 3.0 | 65 | 800 | 9.9 | 2.10 | 33 | 0.05 | 10 | +0.095 |
| 1N6340US | 47.0 | 44.2 | 2.7 | 75 | 900 | 9.0 | 2.25 | 36 | 0.05 | 10 | +0.095 |
| 1N6341US | 51.0 | 48.0 | 2.5 | 85 | 1000 | 8.3 | 2.50 | 39 | 0.05 | 10 | +0.096 |
| 1N6342US | 56.0 | 52.7 | 2.2 | 100 | 1200 | 7.6 | 2.70 | 43 | 0.05 | 10 | +0.097 |
| 1N6343US | 62.0 | 58.4 | 2.0 | 125 | 1300 | 6.8 | 2.90 | 47 | 0.05 | 10 | +0.098 |
| 1N6344US | 68.0 | 64.1 | 1.8 | 155 | 1500 | 6.3 | 3.20 | 52 | 0.05 | 10 | +0.101 |
| 1N6345US | 75.0 | 70.8 | 1.7 | 180 | 1600 | 5.7 | 3.40 | 56 | 0.05 | 10 | +0.103 |
| 1N6346US | 82.0 | 77.4 | 1.5 | 220 | 1800 | 5.2 | 3.80 | 62 | 0.05 | 10 | +0.105 |
| 1N6347US | 91.0 | 86.0 | 1.4 | 270 | 2100 | 4.7 | 4.20 | 69 | 0.05 | 10 | +0.108 |
| 1N6348US | 100.0 | 94.5 | 1.3 | 340 | 2400 | 4.3 | 4.40 | 76 | 0.05 | 10 | +0.110 |
| 1N6349US | 110.0 | 104.0 | 1.1 | 500 | 2800 | 3.9 | 4.80 | 84 | 0.05 | 10 | +0.110 |
| 1N6350US | 120.0 | 113.0 | 1.0 | 600 | 3200 | 3.5 | 5.20 | 91 | 0.05 | 10 | +0.110 |
| 1N6351US | 130.0 | 122.0 | 0.95 | 850 | 4100 | 3.3 | 5.60 | 99 | 0.05 | 10 | +0.110 |

PACKAGE DIMENSIONS (inches/mm)



| Symbol | Dimensions | | | |
|--------|------------|------|-------------|------|
| | Inches | | Millimeters | |
| | Min | Max | Min | Max |
| BD | .070 | .085 | 1.78 | 2.16 |
| BL | .165 | .195 | 4.19 | 4.95 |
| ECT | .019 | .028 | 0.48 | 0.71 |
| S | .003 min | | 0.08 min | |

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PART ORDERING INFORMATION

The following part numbers can be purchased in either axial or surface mount devices and screened and tested to the military screening flow. The parts are marked in accordance with the testing performed, example:

| Sensitron Screening Level | *Part Number-- Surface Mount Package (example for 1N6324) |
|---------------------------|---|
| 1N | 1N6324US, 1N6324U |
| JAN | JAN1N6324US, JAN1N6324U |
| JANTX | JANTX1N6324US, JANTX1N6324U |
| JANTXV | JANTXV1N6324US, JANTXV1N6324U |
| JANS | JANS1N6324US, JANS1N6324U |

*Parts can also be ordered Tape & Reel

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