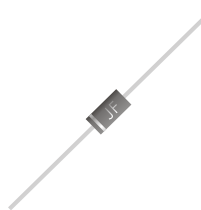


FEATURES

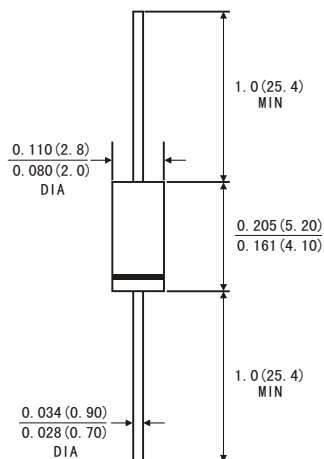
- Low leakage, low zener impedance at low current
- Maximum power dissipation of 1.5W is ideally suited for stabilized power supply, etc.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

MECHANICAL DATA

- Case: DO-41 molded plastic, R-1 and SMA package are upon request
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- *Polarity:* Color band denotes cathode end



DO-41



ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) (TA=25°C)

| | <i>Symbols</i> | <i>Value</i> | <i>Units</i> |
|---|------------------|--------------|--------------|
| Zener current see table "Characteristics" | | | |
| Power dissipation | P _{tot} | 1.5 | W |
| Junction temperature | T _J | 200 | °C |
| Storage temperature range | T _{STG} | -65 to +200 | °C |

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

ELECTRICAL CHARACTERISTICS (TA=25°C)

| | <i>Symbols</i> | <i>Min</i> | <i>Typ</i> | <i>Max</i> | <i>Units</i> |
|--|------------------|------------|------------|------------------|--------------|
| Thermal resistance junction to ambient | R _{θJA} | | | 65 ¹⁾ | °C/W |
| Forward voltage at I _F =200mA | V _F | | | 1.5 | V |

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

1N5921... PLASTIC PACKAGE ZENER DIODES

Electrical characteristics (TA=25°C)

| Type | Nominal Zener voltage | | Maximum Zener impedance | | | Maximum reverse leakage current | | Max regulator zener current |
|--------|-----------------------|------|-------------------------|---------|------|---------------------------------|-------|-----------------------------|
| | Vz@IzT | IzT | ZzT@IzT | Zzx@Izx | Izx | IR@VR | VR | IzM@50°C |
| | V | mA | Ω | Ω | mA | uA | V | mA |
| 1N5921 | 6.8 | 55.1 | 2.5 | 200 | 1.0 | 5.0 | 5.2 | 220 |
| 1N5922 | 7.5 | 50.0 | 3.0 | 400 | 0.5 | 5.0 | 6.8 | 200 |
| 1N5923 | 8.2 | 45.7 | 3.5 | 400 | 0.5 | 5.0 | 6.5 | 182 |
| 1N5924 | 9.1 | 41.2 | 4.0 | 500 | 0.5 | 5.0 | 7.0 | 164 |
| 1N5925 | 10 | 37.5 | 4.5 | 500 | 0.25 | 5.0 | 8.0 | 150 |
| 1N5926 | 11 | 34.1 | 5.5 | 550 | 0.25 | 1.0 | 8.4 | 136 |
| 1N5927 | 12 | 31.2 | 6.5 | 550 | 0.25 | 1.0 | 9.1 | 125 |
| 1N5928 | 13 | 28.8 | 7.0 | 550 | 0.25 | 1.0 | 9.9 | 115 |
| 1N5929 | 15 | 25.0 | 9.0 | 600 | 0.25 | 1.0 | 11.4 | 100 |
| 1N5930 | 16 | 23.4 | 10.0 | 600 | 0.25 | 1.0 | 12.2 | 93 |
| 1N5931 | 18 | 20.8 | 12.0 | 650 | 0.25 | 1.0 | 13.7 | 83 |
| 1N5932 | 20 | 18.7 | 14.0 | 650 | 0.25 | 1.0 | 15.2 | 75 |
| 1N5933 | 22 | 17.0 | 17.5 | 650 | 0.25 | 1.0 | 16.7 | 68 |
| 1N5934 | 24 | 15.6 | 19 | 700 | 0.25 | 1.0 | 18.2 | 62 |
| 1N5935 | 27 | 13.9 | 23 | 700 | 0.25 | 1.0 | 20.6 | 55 |
| 1N5936 | 30 | 12.5 | 26 | 750 | 0.25 | 1.0 | 22.8 | 50 |
| 1N5937 | 33 | 11.4 | 33 | 800 | 0.25 | 1.0 | 25.1 | 45 |
| 1N5938 | 36 | 10.4 | 38 | 850 | 0.25 | 1.0 | 27.4 | 41 |
| 1N5939 | 39 | 9.6 | 45 | 900 | 0.25 | 1.0 | 29.7 | 38 |
| 1N5940 | 43 | 8.7 | 53 | 950 | 0.25 | 1.0 | 32.7 | 34 |
| 1N5941 | 47 | 8.0 | 67 | 1000 | 0.25 | 1.0 | 35.8 | 31 |
| 1N5942 | 51 | 7.3 | 70 | 1100 | 0.25 | 1.0 | 38.8 | 29 |
| 1N5943 | 56 | 6.7 | 86 | 1300 | 0.25 | 1.0 | 42.6 | 26 |
| 1N5944 | 62 | 6.0 | 100 | 1500 | 0.25 | 1.0 | 47.1 | 24 |
| 1N5945 | 68 | 5.5 | 120 | 1700 | 0.25 | 1.0 | 51.7 | 22 |
| 1N5946 | 75 | 5.0 | 140 | 2000 | 0.25 | 1.0 | 56.0 | 20 |
| 1N5947 | 82 | 4.6 | 160 | 2500 | 0.25 | 1.0 | 62.2 | 18 |
| 1N5948 | 91 | 4.1 | 200 | 3000 | 0.25 | 1.0 | 69.2 | 16 |
| 1N5949 | 100 | 3.7 | 250 | 3100 | 0.25 | 1.0 | 76.0 | 15 |
| 1N5950 | 110 | 3.4 | 300 | 4000 | 0.25 | 1.0 | 83.6 | 13 |
| 1N5951 | 120 | 3.1 | 380 | 4500 | 0.25 | 1.0 | 91.2 | 12 |
| 1N5952 | 130 | 2.9 | 450 | 5000 | 0.25 | 1.0 | 98.8 | 11 |
| 1N5953 | 150 | 2.5 | 600 | 6000 | 0.25 | 1.0 | 114.0 | 10 |
| 1N5954 | 160 | 2.3 | 700 | 6500 | 0.25 | 1.0 | 121.6 | 9 |
| 1N5955 | 180 | 2.1 | 900 | 7000 | 0.25 | 1.0 | 136.8 | 8 |
| 1N5956 | 200 | 1.9 | 1200 | 8000 | 0.25 | 1.0 | 152.0 | 7 |

Note:

1. Standard zener voltage tolerance available is $\pm 20\%$. Add suffix "A" is for $\pm 10\%$ tolerance. Add suffix "B" is for $\pm 5\%$.
2. For surface mounted package, the type name is SMA59XX.