

# Zener 1N5231C

## Absolute Maximum Ratings\* T<sub>A</sub> = 25°C unless otherwise noted

| Symbol           | Parameter   | Value       | Units       |
|------------------|---|-------------|-------------|
| P <sub>D</sub>   | Power Dissipation<br>Derate above 75°C            | 500<br>4.0  | mW<br>mW/°C |
| T <sub>STG</sub> | Storage Temperature Range                         | -65 to +200 | °C          |
| TJ               | Maximum Junction Operating Temperature            | + 200       | °C          |
|                  | Lead Temperature (1/16" from case for 10 seconds) | + 230       | °C          |
|                  | Surge Power**                                     | 10          | W           |

\*These ratings are limiting values above which the serviceability of the diode may be impaired.

\*\*Non-recurrent square wave PW= 8.3 ms, TA= 50 degrees C.

#### NOTES:

1) These ratings are based on a maximum junction temperature of 200 degrees C.
2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

# **Electrical Characteristics** $T_{A} = 25^{\circ}C$ unless otherwise noted

| Symbol          | Parameter            | Test Conditions          | Min. | Max. | Units |
|-----------------|----------------------|--------------------------|------|------|-------|
| Vz              | Zener Voltage        | $I_z = 20 \text{mA}$     | 5.0  | 5.2  | V     |
| Zz              | Zener Impedance      | $I_Z = 20 \text{mA}$     |      | 17   | Ω     |
| Z <sub>ZK</sub> | Zener Knee Impedance | I <sub>ZK</sub> = 0.25mA |      | 1.6K | Ω     |
| I <sub>R</sub>  | Reverse Current      | V <sub>R</sub> = 2.0V    |      | 5.0  | μΑ    |
| V <sub>F</sub>  | Forward Voltage      | I <sub>F</sub> = 0.2A    |      | 1.1  | V     |

Tolerance = 2%



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