

Technical Data

DIODE



maximum ratings

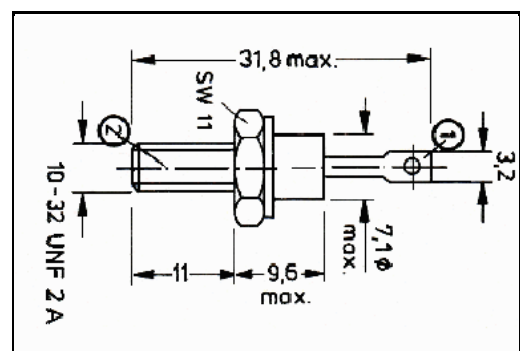
| | | | | |
|---|-------|------|------|-----------------|
| Voltage, Reverse (VZ) | 130.0 | V | NO. | 1N3009RB |
| Voltage, Reverse Peak (VRM) | | V | TYPE | 10W-ZENER |
| Current at VR = 0V (IO) | | A | | |
| Current Average Rectified (IF) | 2.0 | A | | |
| Current Surge Peak (IZM) | 0.062 | A | CASE | DO-4_UNF |
| Current, Surge (IFM) at tp = | | A | | CATHODE TO CASE |
| Max. Power Dissipation (PT) at TC = 55 °C | 10.0 | W | | |
| Max. Thermal Resistance (Rth J-C) | 12.0 | °C/W | | |
| Max. Junction Temperature (TJ) | 175.0 | °C | | |

PERFORMANCE CHARACTERISTICS at $T_c = 25^\circ\text{C}$, unless otherwise noted

| NO. | SYMBOL | CONDITIONS | MIN. | MAX. | UNITS |
|-----|--------|--|-------|-------|------------------|
| 1. | VZ | $I_Z = 19.0 \text{ mA}$, $t_p = 100.0 \mu\text{s}$, $\text{dc} = 0.1 \%$ | 123.5 | 136.5 | V |
| 2. | RZ | $I_Z = 19.0 \text{ mA}$, $\Delta I_Z = 10.0 \%$ I_Z , $f = 1.0 \text{ kHz}$ | - | 100.0 | Ω |
| 3. | RZ | $I_Z = 1.0 \text{ mA}$ | - | 1.3 | $\text{k}\Omega$ |
| 4. | IR | $V_R = 98.8 \text{ V}$ | - | 5.0 | μA |
| 5. | VF | $I_F = 2.0 \text{ A}$ (1) | - | 1.5 | V |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | |
| 13. | | | | | |
| 14. | | | | | |
| 15. | | | | | |
| 16. | | | | | |
| 17. | | | | | |
| 18. | | | | | |
| 19. | | | | | |
| 20. | | | | | |

Notes (1) pulse-tested $t_p \leq 300 \mu\text{s}$, duty cycle $\leq 2 \%$

DIMENSIONS
in mm



Marking 1N3009RB
Customer GENERAL PURPOSE