



Small Signal Product Rectifier Diode

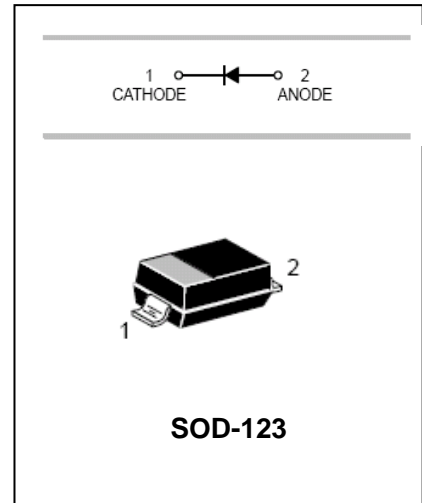
2CZ4004-2CZ4005

FEATURES

- Surface mount device type
- Moisture sensitivity level 1
- Low leakage current
- Pb free version and RoHS compliant
- Packing code with suffix "G" means green compound (halogen-free)Fast Switching Speed



Lead-free



ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| 2CZ4004 | Z44 | SOD-123 |
| 2CZ4005 | Z45 | SOD-123 |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Characteristic | Symbol | 2CZ4004 | 2CZ4005 | Unit |
|--|----------------------------|----------|---------|------|
| DC Reverse Voltage | $I_R=100\mu A$ V_R | 400 | 600 | V |
| Non-Repetitive Peak Reverse Voltage | $I_R=100\mu A$ V_{RM} | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 280 | 420 | V |
| Average Rectified Output Current | I_o | 1 | | A |
| Non-repetitive peak forward surge current 8.3ms half sine wave | I_{FSM} | 7.5 | | A |
| Power Dissipation | P_d | 350 | | mW |
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | 357 | | °C/W |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55t+150 | | °C |



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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Characteristic | Symbol | Min | Max | Unit | Test Condition |
|------------------------------|------------|-----|-----|---------|----------------------------------|
| Forward Voltage | V_F | - | 1.1 | V | $I_F=1.0A$ |
| Maximum Peak Reverse Current | I_R | - | 5 | μA | $V_R=V_{RM}$ |
| Total capacitance | C_{TOTJ} | - | 15 | pF | $V_R=4V, f=1.0MHz$ |
| Reverse Recovery Time | t_{rr} | 1 | 1.6 | us | $I_F=0.5A, I_R=1A, I_{rr}=0.25A$ |

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Fig.1 Typical Forward Characteristics

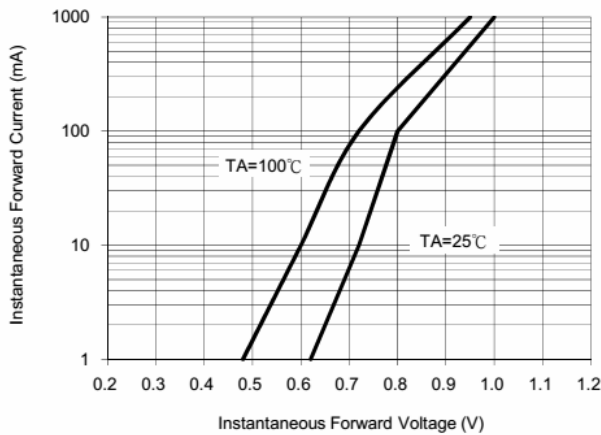


Fig. 2 Reverse Characteristics

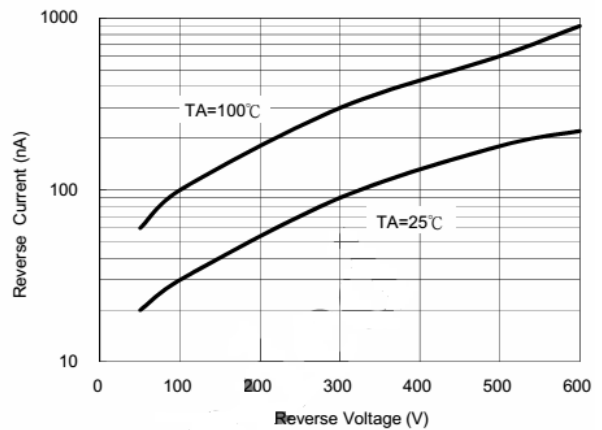


Fig. 3 Capacitance Characteristics

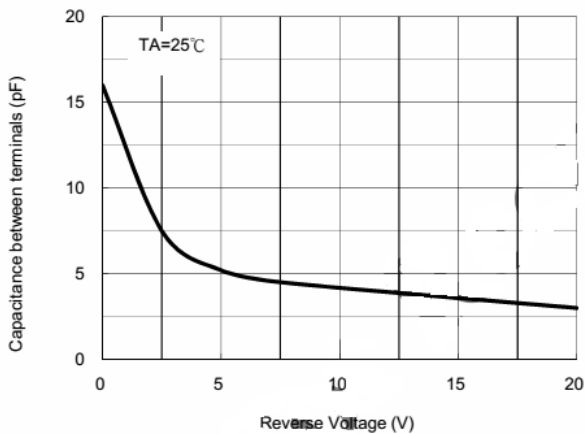
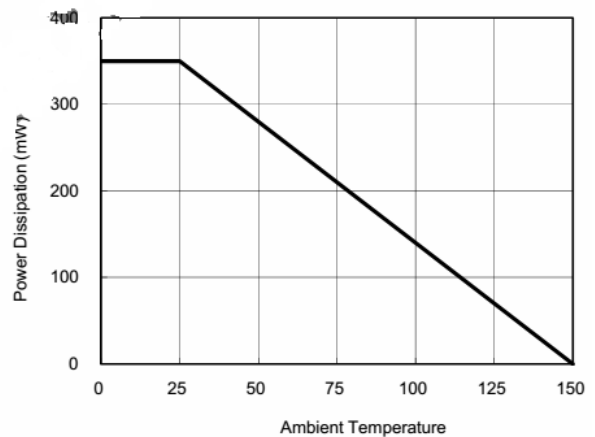


Fig.4 Power Derating Curve



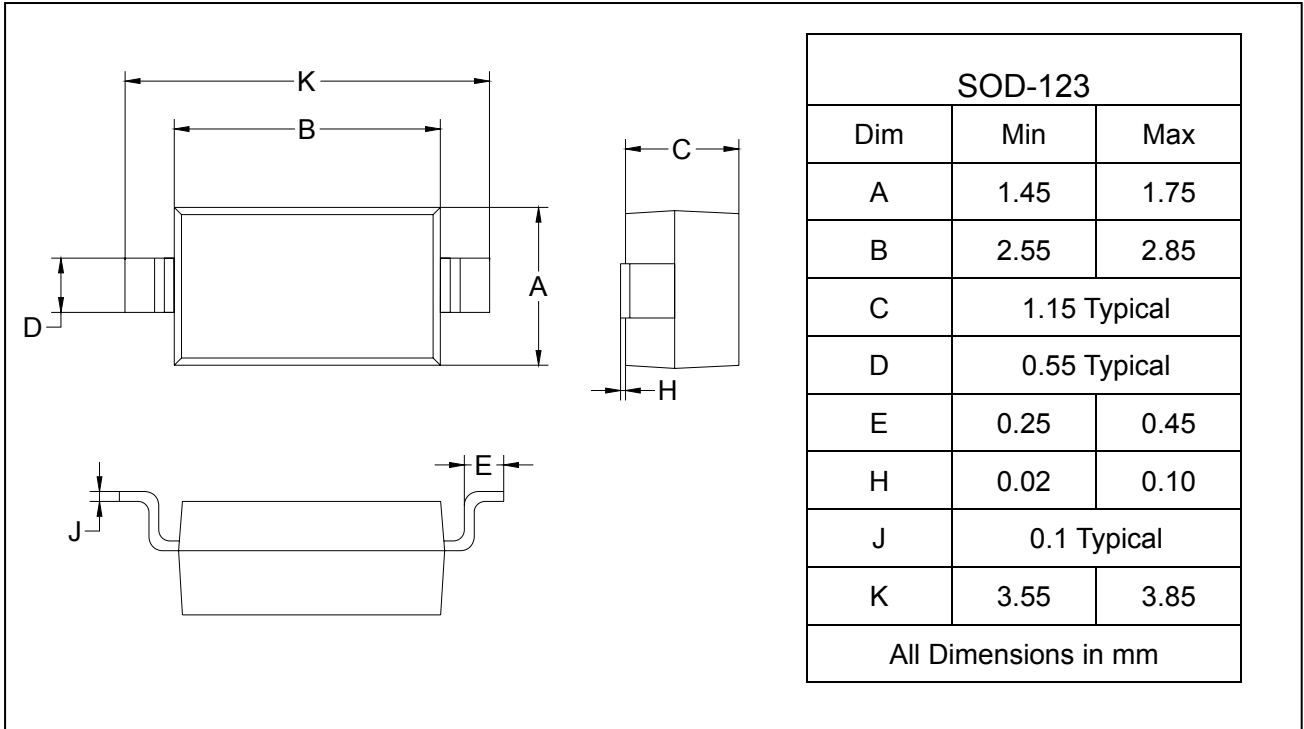
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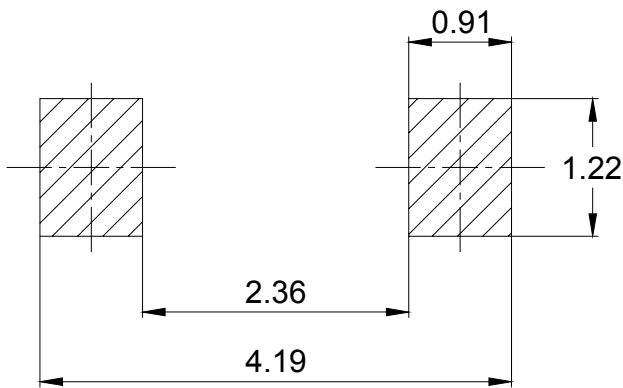
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

| Device | Package | Shipping |
|-----------------|---------|----------------|
| 2CZ4004-2CZ4005 | SOD-123 | 3000/Tape&Reel |