

SOD-123 SCHOTTKY BARRIER DIODE

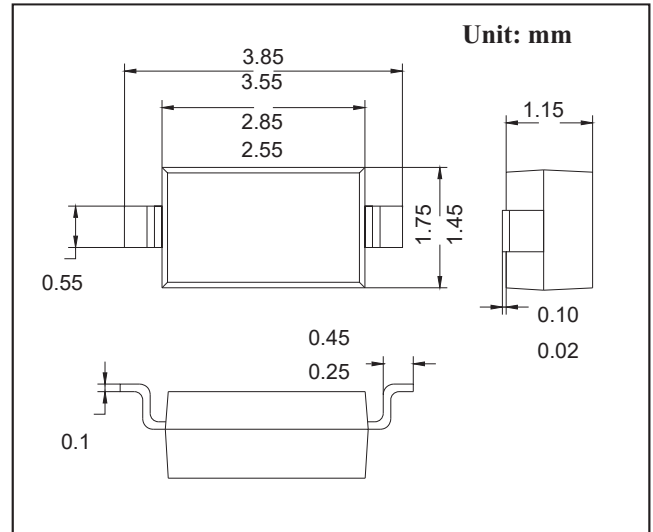
VOLTAGE RANGE: 40V PEAK PULSE POWER:500mW

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient
- Protection High Conductance
- Also Available in Lead Free Version

MECHANICAL DATA

- Case: SOD-123 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



| Parameter | Symbo | Value | Unit |
|---|-----------------|----------|---------------|
| Peak repetitive peak reverse voltage | V_{RRM} | 40 | V |
| Working peak reverse voltage | V_{RWM} | | |
| DC blocking voltage | V_R | | |
| RMS reverse voltage reverse voltage (DC) | $V_{R(RMS)}$ | 28 | V |
| Average rectified output current | I_o | 0.5 | A |
| Non-repetitive Peak Forward Surge Current @ $t=8.3ms$ | I_{FSM} | 5.5 | A |
| Power dissipation | P_D | 500 | mW |
| Thermal resistance junction to ambient | $R_{\theta JA}$ | 200 | $^{\circ}C/W$ |
| Junction temperature | T_j | 125 | $^{\circ}C$ |
| Storage temperature | T_{STG} | -55~+150 | $^{\circ}C$ |
| Voltage rate of change | dv/dt | 1000 | V/ μs |

Electrical Specification

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| | Symbol | Test conditions | Min | Typ | Max | Unit |
|-------------------------------|---------|-----------------|-----|-----|------|---------|
| Reverse breakdown voltage | $V(BR)$ | $I_R=20\mu A$ | 40 | | | V |
| Reverse current | I_R | $V_R=20V$ | | | 10 | μA |
| | | $V_R=40V$ | | | 20 | |
| Forward voltage | V_F | $I_F=0.5A$ | | | 0.51 | V |
| | | $I_F=1.0A$ | | | 0.62 | |
| Capacitance between terminals | C_T | $V_R=0, f=1MHz$ | | | 170 | pF |

MARKING:SF

RATINGS AND CHARACTERISTIC CURVES

