

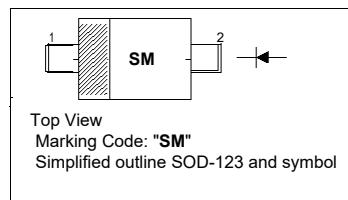
# 1N6263W Surface Mount Schottky Barrier Diode

## Features

- Low forward voltage
- Low reverse capacitance

## PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |



## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

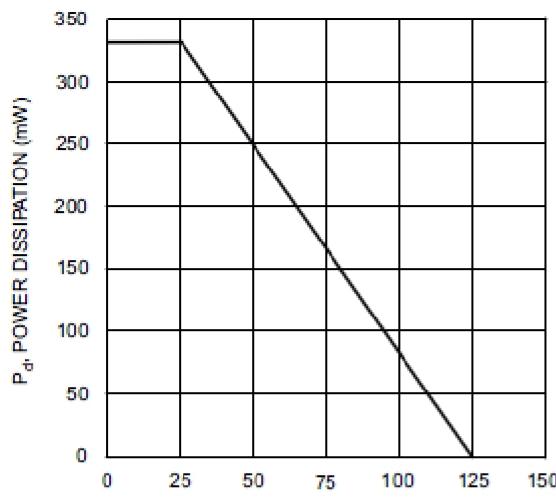
| Parameter   | Symbol          | Value         | Unit                        |
|---|-----------------|---------------|-----------------------------|
| Peak Repetitive Reverse Voltage   | $V_{RRM}$       | 60            | V                           |
| Working Peak Reverse Voltage  | $V_{RWM}$       | 60            | V                           |
| DC Blocking Voltage   | $V_R$           | 60            | V                           |
| RMS Reverse Voltage   | $V_{R(RMS)}$    | 42            | V                           |
| Average Rectified Forward Current   | $I_{F(AV)}$     | 15            | mA                          |
| Non-Repetitive Peak Forward Surge Current at $t = 1 \text{ s}$<br>at $t = 10 \mu\text{s}$ | $I_{FSM}$       | 50<br>2       | mA<br>A                     |
| Thermal Resistance Junction to Ambient Air  | $R_{\theta JA}$ | 300           | $^\circ\text{C} / \text{W}$ |
| Power Dissipation   | $P_{tot}$       | 333           | mW                          |
| Junction Temperature  | $T_j$           | 125           | $^\circ\text{C}$            |
| Storage Temperature Range   | $T_{stg}$       | - 55 to + 125 | $^\circ\text{C}$            |

## Characteristics at $T_a = 25^\circ\text{C}$

| Parameter   | Symbol      | Min.   | Max.      | Unit |
|---|-------------|--------|-----------|------|
| Reverse Breakdown Voltage<br>at $I_R = 10 \mu\text{A}$  | $V_{(BR)R}$ | 60     | -         | V    |
| Forward Voltage<br>at $I_F = 1 \text{ mA}$<br>at $I_F = 15 \text{ mA}$                                  | $V_F$       | -<br>- | 0.41<br>1 | V    |
| Reverse Current<br>at $V_R = 50 \text{ V}$  | $I_R$       | -      | 200       | nA   |
| Total Capacitance<br>at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$                                       | $C_{tot}$   | -      | 2.2       | pF   |
| Reverse Recovery Time<br>at $I_F = I_R = 5 \text{ mA}$ , $I_{rr} = 0.1 \times I_R$ , $R_L = 100 \Omega$ | $t_{rr}$    | -      | 1         | ns   |

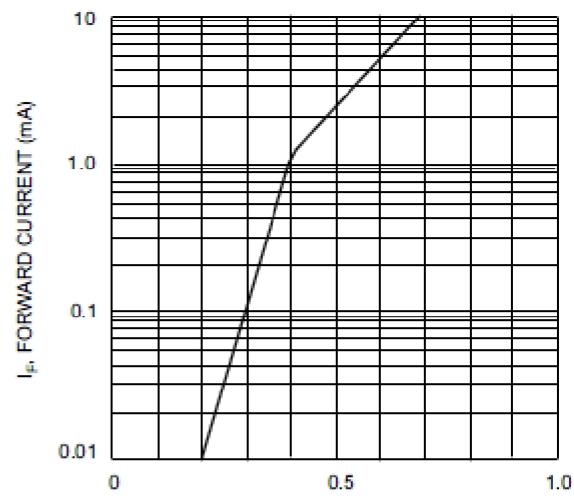
## Typical Characteristics

**1N6263W**



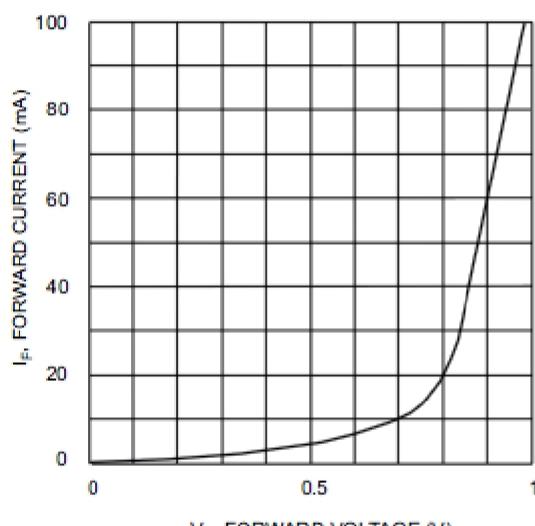
T<sub>A</sub>, AMBIENT TEMPERATURE (°C)

Fig. 1 Power Derating Curve



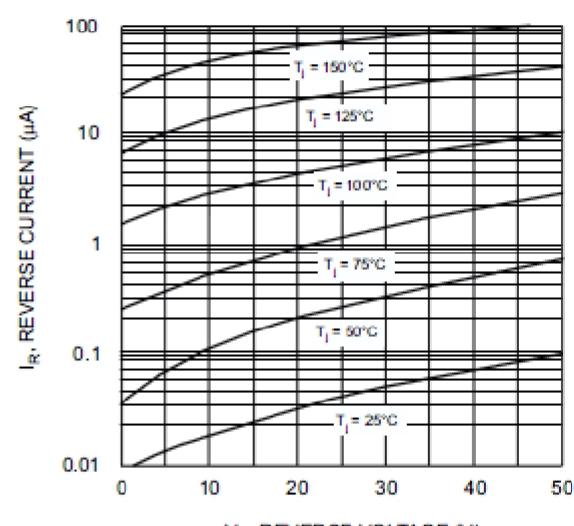
V<sub>f</sub>, FORWARD VOLTAGE (V)

Fig. 2 Typical Forward Characteristics



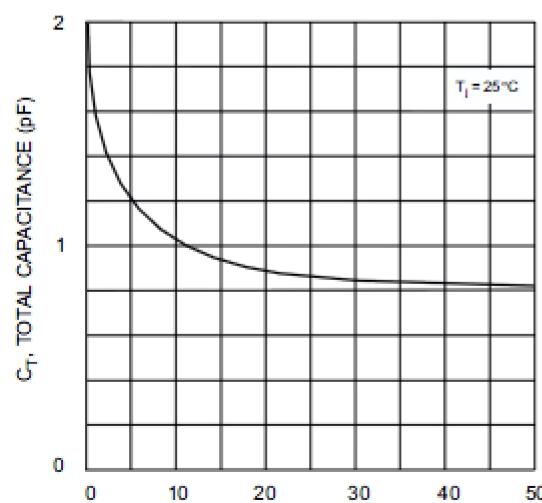
V<sub>f</sub>, FORWARD VOLTAGE (V)

Fig. 3 Typical Forward Characteristics



V<sub>r</sub>, REVERSE VOLTAGE (V)

Fig. 4 Typical Reverse Characteristics



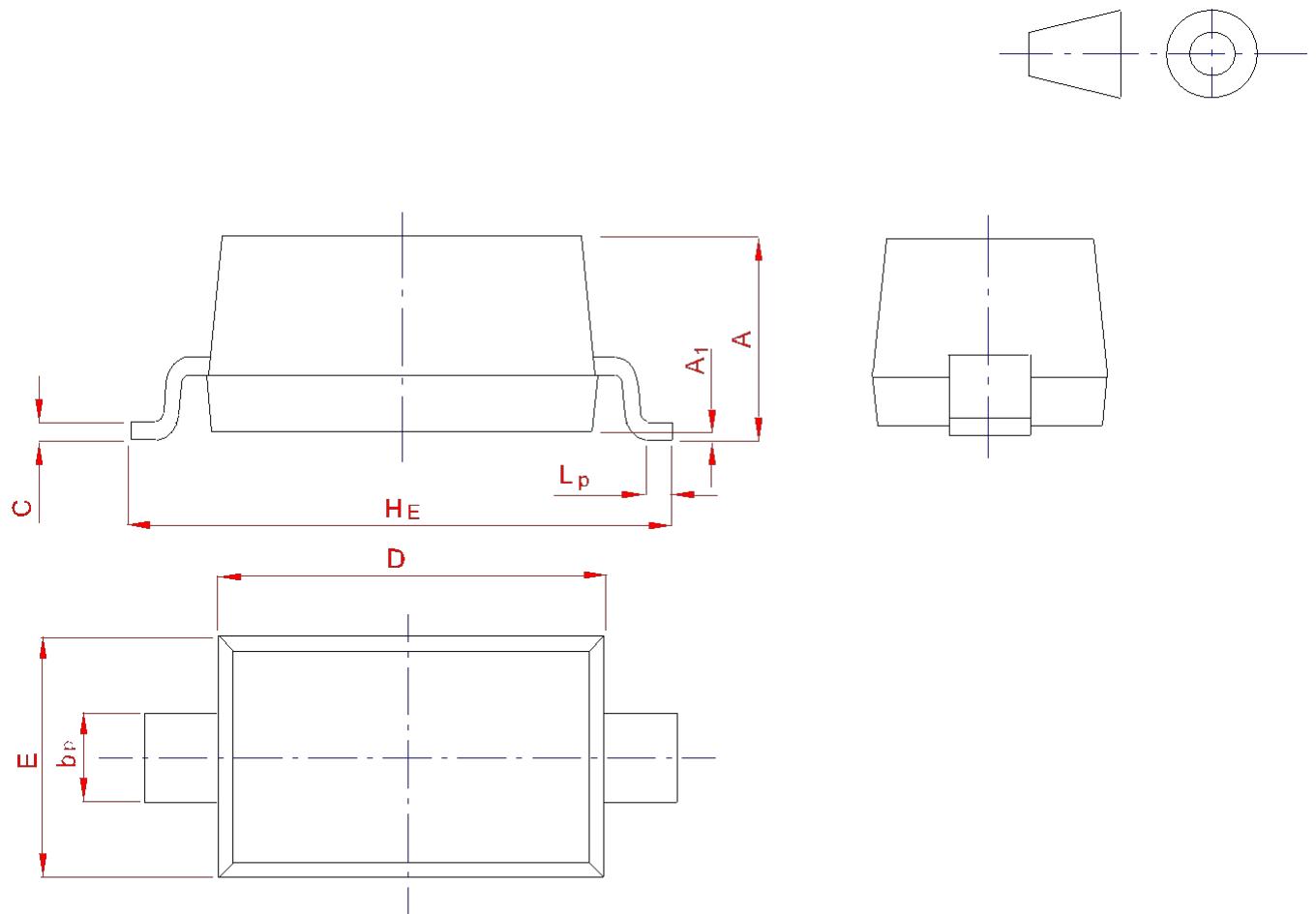
V<sub>r</sub>, REVERSE VOLTAGE (V)

Fig. 5 Typ.Total Capacitance vs Reverse Voltage

## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



| UNIT | A            | b <sub>p</sub> | C              | D            | E            | H <sub>E</sub> | A <sub>1</sub> | L <sub>p</sub> |
|------|--------------|----------------|----------------|--------------|--------------|----------------|----------------|----------------|
| mm   | 1.20<br>0.90 | 0.60<br>0.50   | 0.135<br>0.100 | 2.75<br>2.55 | 1.65<br>1.55 | 3.85<br>3.55   | 0.10<br>0.01   | 0.50<br>0.20   |