



# 1N6263W

## Surface Mount Schottky Barrier Diode



Voltage Range  
60 Volts  
400m Watts Power Dissipation

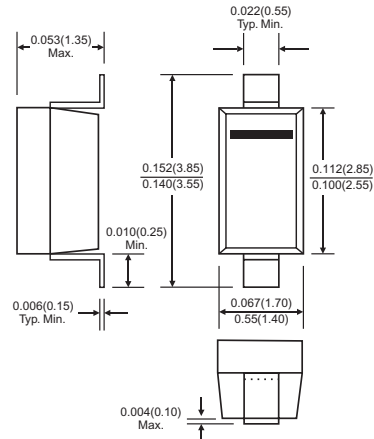
### Features

- ✧ Low forward voltage drop
- ✧ Guard Ring Construction for Transient Protection
- ✧ Fast switching time
- ✧ Low Reverse Capacitance
- ✧ Surface mount package ideally suited for automatic insertion

### Mechanical Data

- ✧ Case: SOD-123, Plastic
- ✧ Terminals: Solderable per MIL-STD-202, Method 208
- ✧ Polarity: Cathode Band
- ✧ Marking: Date Code and Type Code
- ✧ Type Code: SB
- ✧ Weight: 0.01 grams (approx.)

### SOD-123



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

#### Maximum Ratings

| Type Number                                         | Symbol   | 1N6263W      | Units |
|-----------------------------------------------------|----------|--------------|-------|
| Peak Repetitive Reverse Voltage                     | VRRM     | 60           | V     |
| Working Peak Reverse Voltage                        | VRWM     |              |       |
| DC Blocking Voltage                                 | VR       |              |       |
| RMS Reverse Voltage                                 | VR(RMS)  | 42           | V     |
| Forward Continuous Current                          | IF       | 15           | mA    |
| Non-Repetitive Peak Forward Surge Current           | IFSM     | 50           | mA    |
| @ t ≤ 1.0s                                          |          | 2.0          | A     |
| @ t = 10ms                                          |          |              |       |
| Power Dissipation (Note 1)                          | Pd       | 400          | mW    |
| Thermal Resistance Junction to Ambient Air (Note 1) | R θ JA   | 375          | K/W   |
| Operating and Storage Temperature Range             | TJ, TSTG | -65 to + 175 | °C    |

#### Electrical Characteristics

| Type Number                                | Symbol | Min | Typ | Max  | Units |
|--------------------------------------------|--------|-----|-----|------|-------|
| Reverse Breakdown Voltage (Note 3) IR=10uA | V(BR)  | 60  | —   | —    | V     |
| Reverse Leakage Current VR=50V             | IR     | —   | —   | 200  | nA    |
| Forward Voltage Drop IF=1.0mA              | VF     | —   | —   | 0.41 | V     |
| IF=15mA                                    |        |     |     | 1.0  |       |
| Junction Capacitance VR=0, f=1.0MHz        | Cj     | —   | 2.0 | —    | pF    |
| Reverse Recovery Time (Note 2)             | trr    | —   | 1.0 | —    | nS    |

Notes: 1. Valid Provided that Terminals are Kept at Ambient Temperature.

2. Reverse Recovery Test Conditions: IF=IR=5.0mA, Irr=0.1 x IR, RL=100Ω.

3. Test Period < 3000uS.

## RATINGS AND CHARACTERISTIC CURVES (1N6263W)

FIG.1- TYPICAL FORWARD CHARACTERISTIC VARIATIONS FOR PRIMARY CONDUCTION

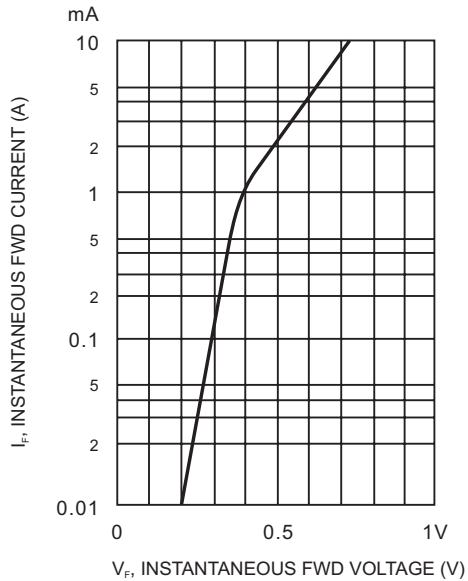


FIG.2- TYP. JUNCTION CAPACITANCE VS REVERSE VOLTAGE

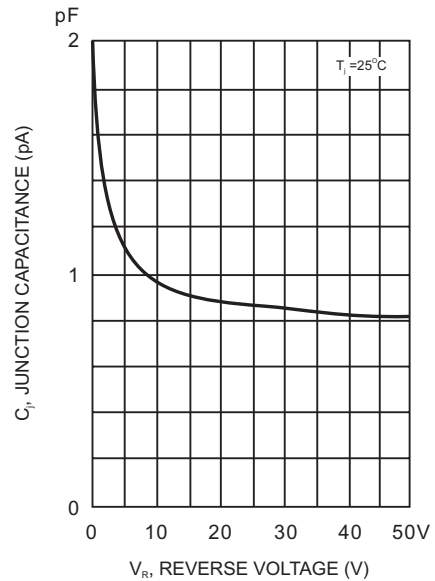


FIG.3- TYPICAL REVERSE CHARACTERISTICS

