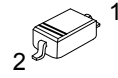


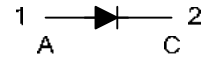
## ■ FEATURES

- \* high speed
- \* Low forward voltage
- \* Fast reverse recovery time

## SYMBOL



SOD-123



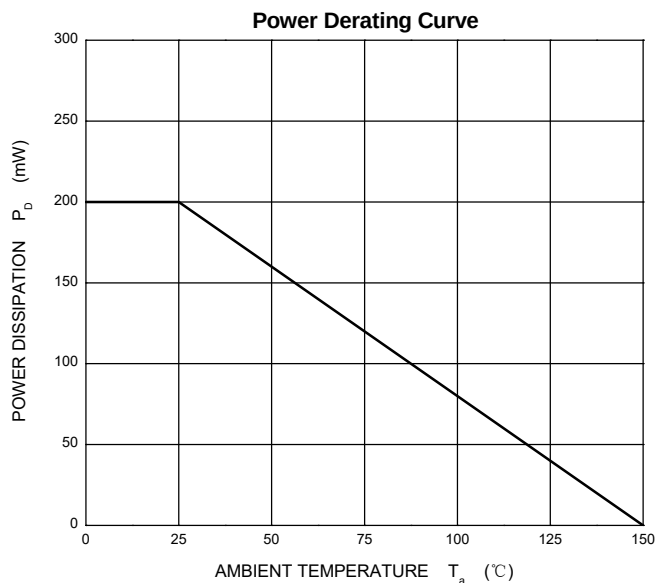
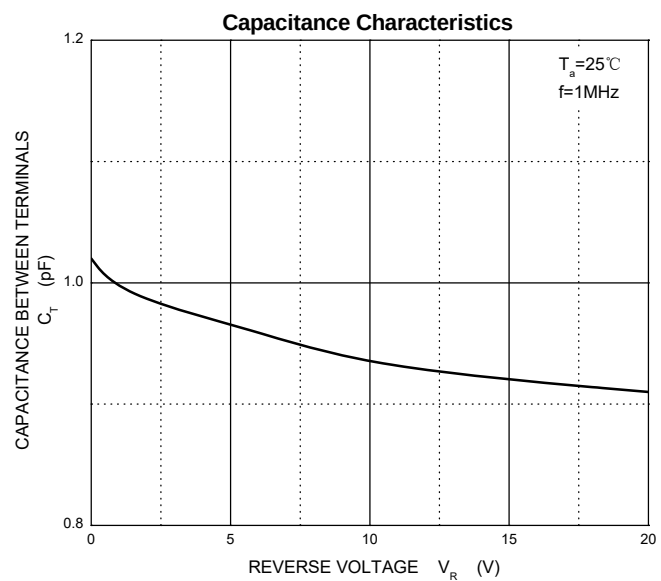
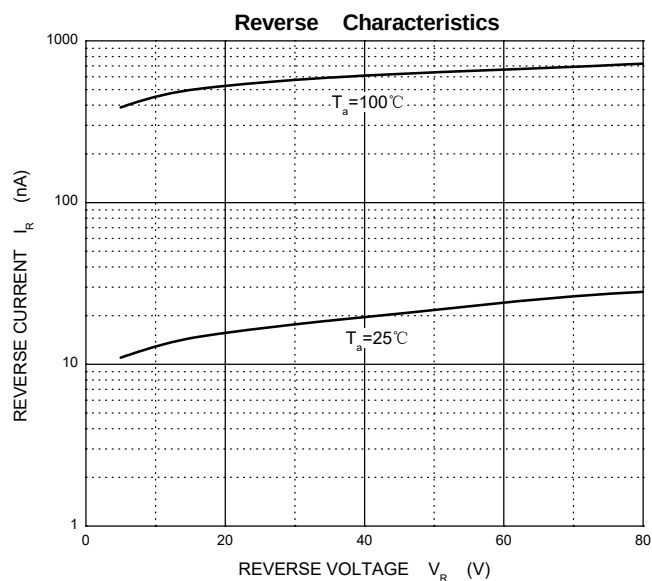
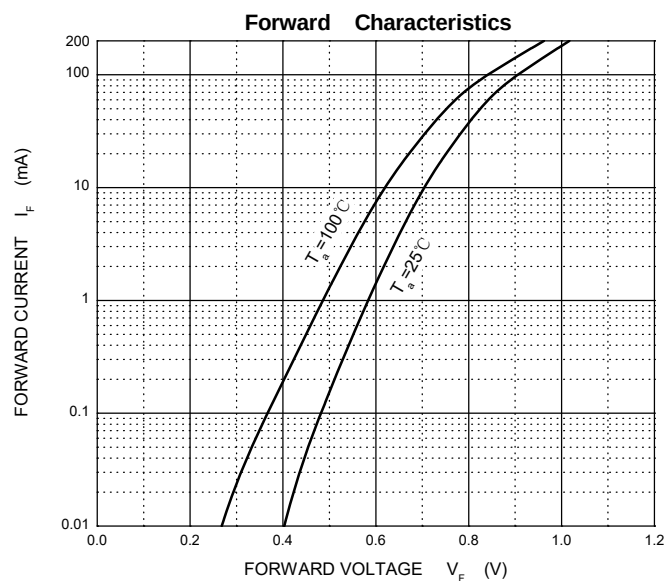
## ■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C, unless otherwise specified)

| Parameter                                          | Symbol                            | Limit    | Unit |
|----------------------------------------------------|-----------------------------------|----------|------|
| Non-Repetitive Peak Reverse Voltage                | V <sub>RM</sub>                   | 100      | V    |
| Peak Repetitive Peak Reverse Voltage               | V <sub>RRM</sub>                  | 100      | V    |
| Working Peak Reverse Voltage                       | V <sub>RWM</sub>                  | 100      | V    |
| DC Blocking Voltage                                | V <sub>R</sub>                    | 100      | V    |
| RMS Reverse Voltage                                | V <sub>R(RMS)</sub>               | 71       | V    |
| Forward Continuous Current                         | I <sub>FM</sub>                   | 300      | mA   |
| Average Rectified Output Current                   | I <sub>O</sub>                    | 150      | mA   |
| Non-Repetitive Peak Forward Surge Currentt@t=8.3ms | I <sub>FSM</sub>                  | 2.0      | A    |
| Power Dissipation                                  | P <sub>d</sub>                    | 200      | mW   |
| Thermal Resistance form Junction to Ambient        | R <sub>θJA</sub>                  | 625      | °C/W |
| Operation Junction and Storage Temperature Range   | T <sub>J</sub> , T <sub>STG</sub> | -55~+150 | °C   |

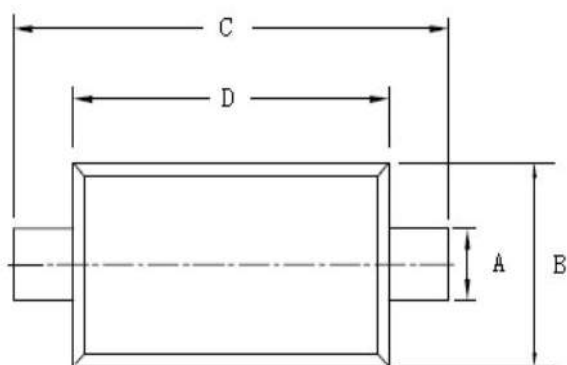
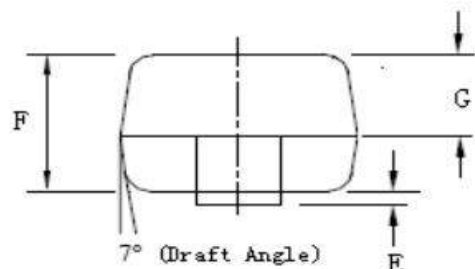
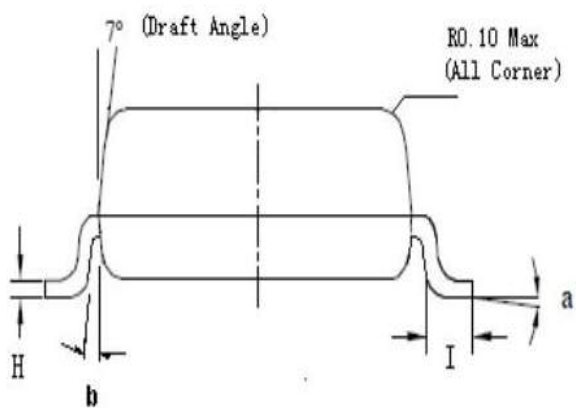
## ■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C, unless otherwise specified)

| Parameter                     | Symbol          | Conditions                                                  | Min | Typ | Max   | Unit |
|-------------------------------|-----------------|-------------------------------------------------------------|-----|-----|-------|------|
| Forward Voltage               | V <sub>F1</sub> | I <sub>F</sub> =1mA                                         |     |     | 0.715 | V    |
|                               | V <sub>F2</sub> | I <sub>F</sub> =10mA                                        |     |     | 0.855 | V    |
|                               | V <sub>F3</sub> | I <sub>F</sub> =50mA                                        |     |     | 1.0   | V    |
|                               | V <sub>F4</sub> | I <sub>F</sub> =150mA                                       |     |     | 1.25  | V    |
| Reverse Current               | I <sub>R1</sub> | V <sub>R</sub> =75V                                         |     |     | 1     | μA   |
|                               | I <sub>R2</sub> | V <sub>R</sub> =20V                                         |     |     | 25    | nA   |
| Capacitance Between Terminals | C <sub>T</sub>  | V <sub>R</sub> =0V, f=1MHz                                  |     |     | 2     | pF   |
| Reverse Recovery Time         | t <sub>rr</sub> | I <sub>F</sub> =I <sub>R</sub> =10mA                        |     |     | 4     | ns   |
|                               |                 | I <sub>rr</sub> =0.1X I <sub>R</sub> , R <sub>L</sub> =100Ω |     |     |       |      |

## ■ TYPICAL CHARACTERISTICS



■ SOD123 PACKAGE OUTLINE DIMENSIONS



| Symbol | Dim in mm |       |       |
|--------|-----------|-------|-------|
|        | Min       | Nom   | Max   |
| A      | 0.520     | 0.550 | 0.570 |
| B      | 1.400     | 1.550 | 1.700 |
| C      | 3.550     | 3.650 | 3.850 |
| D      | 2.550     | 2.650 | 2.850 |
| E      | 0.000     | 0.050 | 0.100 |
| F      | 1.050     | 1.100 | 1.150 |
| G      | 0.620     | 0.650 | 0.670 |
| H      | 0.090     | 0.100 | 0.110 |
| I      | 0.250     | 0.350 | 0.450 |
| a      | 0°        | —     | 6°    |
| b      | 0.4°      | —     | 0.8°  |