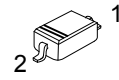


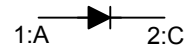
■ PRODUCT CHARACTERISTICS

| | |
|-------------------|-------|
| VR(@IC=100uA) | 100V |
| VF(Typ@IF=250 mA) | 1V |
| IR(@VR=75V) | 2uA |
| IF | 150mA |

SYMBOL



SOD-123



■ FEATURES

- High breakdown voltage
- Low turn-on voltage
- Guard ring construction for transient protection

■ ABSOLUTE MAXIMUM RATINGS (TA=25°C, unless otherwise specified)

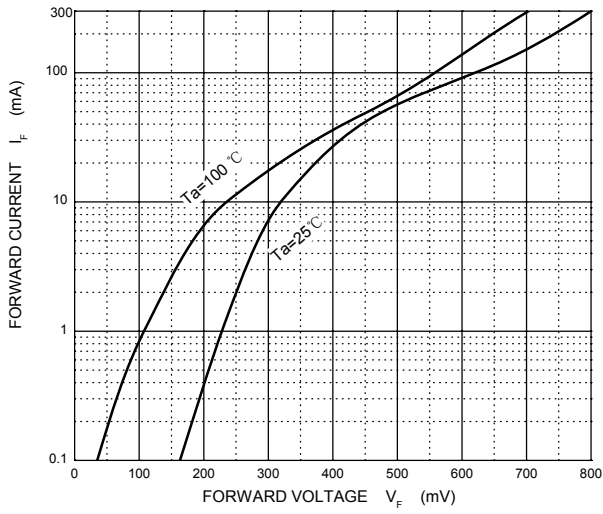
| PARAMETER | SYMBOL | RATINGS | UNIT |
|---|------------------|------------|------|
| Peak Repetitive Peak Reverse Voltage | V _{RRM} | 100 | V |
| Work Peak Reverse Voltage | V _{RWM} | 100 | V |
| Forward continuous Current | I _F | 150 | mA |
| Repetitive Peak Forward Current | I _{FRM} | 350 | mA |
| Non-repetitive Peak Forward Surge Current@t=8.3ms | I _{FSM} | 750 | mA |
| Power Dissipation | P _D | 500 | mW |
| Thermal Resistance From Junction to Ambient | R _{θJA} | 200 | °C/W |
| Operation Junction Temperature Range | T _J | -40 ~ +125 | °C |
| Storage Temperature Range | T _{STG} | -55 ~ +150 | °C |

■ ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

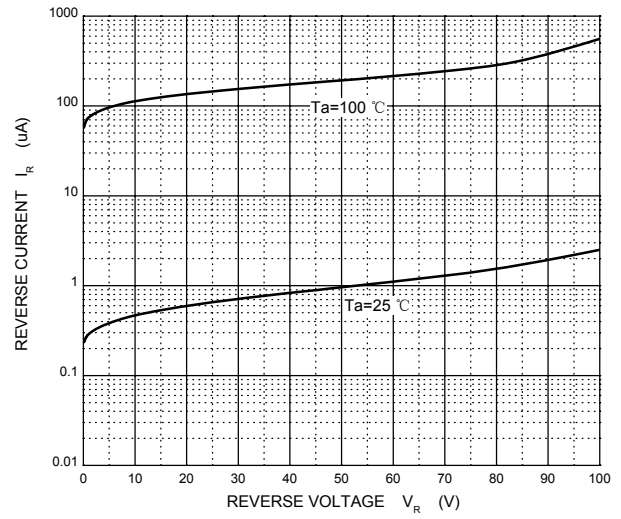
| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---------------------------------|--|------------------------------|-----|-----|------|------|
| Reverse Breakdown Voltage | V _R | I _R = 100μA | 100 | - | - | V |
| Forward Voltage | V _F | I _F =0.1mA | - | - | 0.25 | V |
| | | I _F =10mA | - | - | 0.45 | V |
| | | I _F =250mA | - | - | 1 | V |
| Reverse Voltage Leakage Current | I _R | V _R =1.5V | - | - | 0.3 | mA |
| | | V _R =10V | - | - | 0.5 | μA |
| | | V _R =50V | - | - | 1 | μA |
| | | V _R =75V | - | - | 2 | μA |
| | I _R T _j =60 C | V _R =1.5V | - | - | 12 | μA |
| | | V _R =10V | - | - | 20 | μA |
| | | V _R =50V | - | - | 44 | μA |
| | | V _R =75V | - | - | 80 | μA |
| Diode Capacitance | C _T | V _R =0V, f=1.0MHz | - | 20 | - | pF |
| | | V _R =1V, f=1.0MHz | - | 12 | - | pF |

■ TYPICAL CHARACTERISTICS

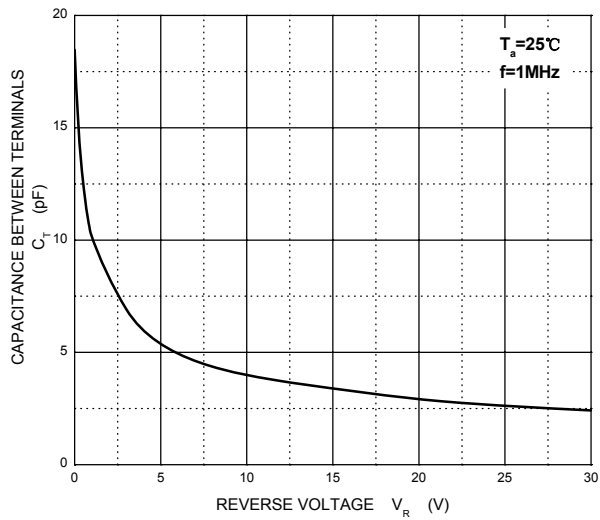
Forward Characteristics



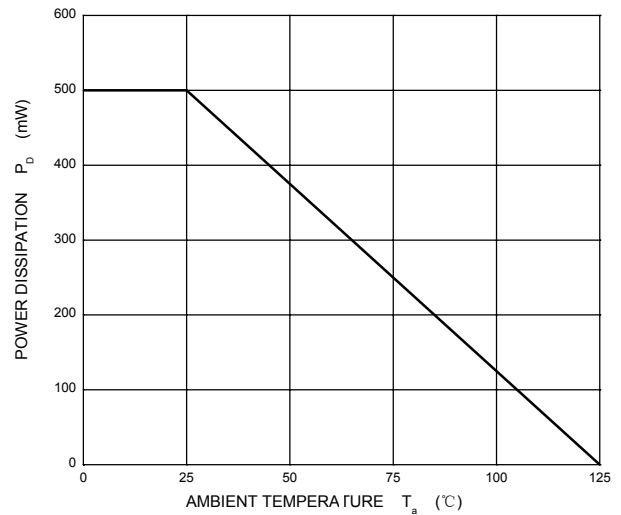
Reverse Characteristics



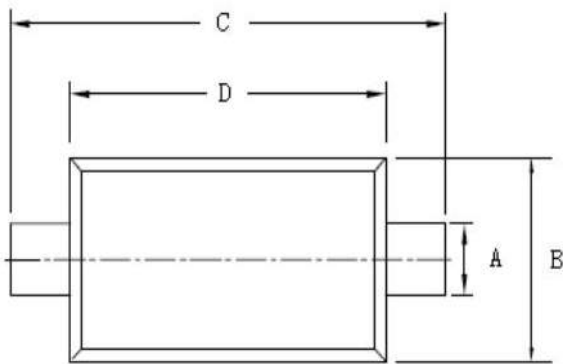
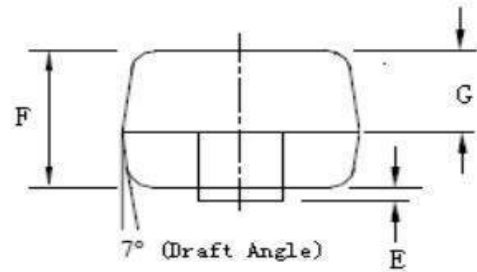
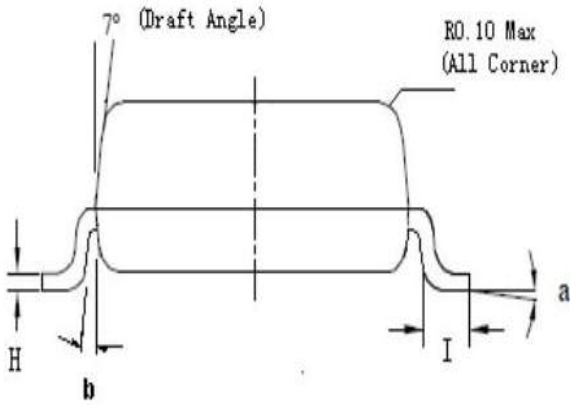
Capacitance Characteristics



Power Derating Curve



■ 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° |