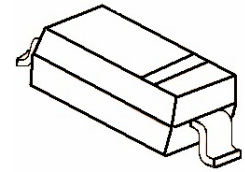


**特征 Features**

- 大电流承受能力。High Current Capability
- 正向压降低。Low Forward Voltage Drop

**机械数据 Mechanical Data**

- 封装: SOD-323 封装 SOD-323 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any



**Marking: B0520WS: SD**  
**B0530WS: SE**  
**B0540WS: SF**

**极限值和温度特性**(TA = 25°C 除非另有规定)

**Maximum Ratings & Thermal Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified.)

| 参数<br>Parameters   | 符号<br>Symbol | B0520WS  | B0530WS | B0540WS | 单位<br>Unit |
|--|--------------|----------|---------|---------|------------|
| 最大可重复峰值反向电压<br>Maximum repetitive peak reverse voltage                           | VRRM         | 20       | 30      | 40      | V          |
| 最大均方根电压<br>Maximum RMS voltage   | VRMS         | 14       | 21      | 28      | V          |
| 最大直流阻断电压<br>Maximum DC blocking voltage  | VDC          | 20       | 30      | 40      | V          |
| 最大正向平均整流电流<br>Maximum average forward rectified current                          | IFM          | 0.5      |         |         | A          |
| 峰值正向浪涌电流 8.3ms 单一正弦半波<br>Peak forward surge current 8.3 ms single half sine-wave | IFSM         | 5.5      |         |         | A          |
| 典型热阻<br>Typical thermal resistance   | RθJA         | 500      |         |         | °C/W       |
| 功率消耗<br>Power Dissipation  | PD           | 200      |         |         | mW         |
| 结温<br>Junction Temperature   | Tj           | 125      |         |         | °C         |
| 存储温度<br>Storage temperature range  | TSTG         | -50-+150 |         |         | °C         |
| 电压率 of change  | Dv/dt        | 1000     |         |         | V/uS       |

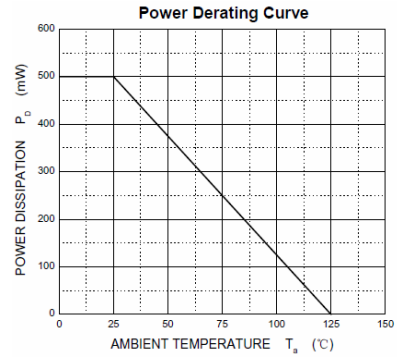
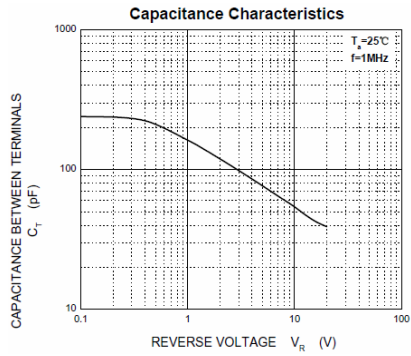
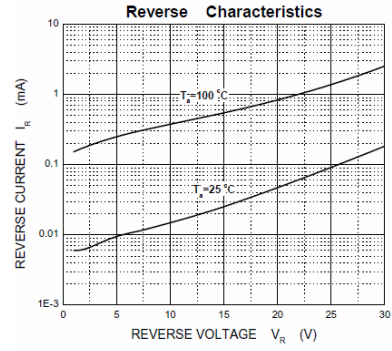
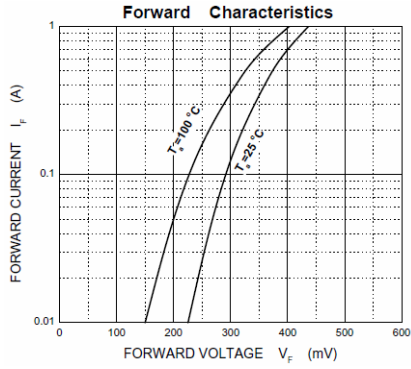
**电特性** (TA = 25°C 除非另有规定)

**Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified).

| 参数<br>Parameters                            | 符号<br>Symbol | 测试条件<br>Test conditions | B0520WS | B0530WS | B0540WS | 单位<br>Unit |
|---|--------------|-------------------------|---------|---------|---------|------------|
| 最大正向电压<br>Maximum forward voltage           | VF           | IF = 0.1A               | 0.330   | 0.375   | ---     | V          |
|   |              | IF = 0.5A               | 0.390   | 0.450   | 0.510   |            |
|   |              | IF = 1.0A               | ---     | ---     | 0.620   |            |
| 最大反向电压<br>Maximum reverse breakdown voltage | VR           | IR=250uA                | 20      | ---     | ---     | V          |
|   |              | IR=200uA                | ---     | 30      | ---     |            |
|   |              | IR=20.0uA               | ---     | ---     | 40      |            |
| 最大反向电流<br>Maximum reverse current           | IR           | VR=10V                  | 75      | ---     | ---     | uA         |
|   |              | VR=15V                  | ---     | 80      | ---     |            |
|   |              | VR=20V                  | 250     | ---     | 10      |            |
|   |              | VR=30V                  | ---     | 500     | ---     |            |
|   |              | VR=40V                  | ---     | ---     | 20      |            |
| Capacitance between terminals               | CT           | VR = 0V, f = 1MHz       | 170     |         |         | pF         |

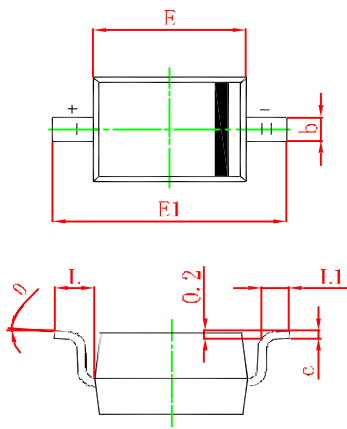
# B0520WS/B0530WS/B0540WS

## 特性曲线 Characteristic Curves



## SOD-323 PACKAGE OUTLINE Plastic surface mounted package

### SOD-323



| Symbol   | Min.(mm)  | Max.(mm)  |
|----------|-----------|-----------|
| A        |           | 1.000     |
| A1       | 0.000     | 0.100     |
| A2       | 0.800     | 0.900     |
| b        | 0.250     | 0.350     |
| c        | 0.080     | 0.150     |
| D        | 1.200     | 1.400     |
| E        | 1.600     | 1.800     |
| E1       | 2.500     | 2.700     |
| L        | 0.475REF  |           |
| L1       | 0.250     | 0.400     |
| $\theta$ | $0^\circ$ | $8^\circ$ |