

### Features

- Fast switching speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High conductance

### Ordering Information

- Shipping Qty:3000/7inch Tape& Reel



SOD323

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



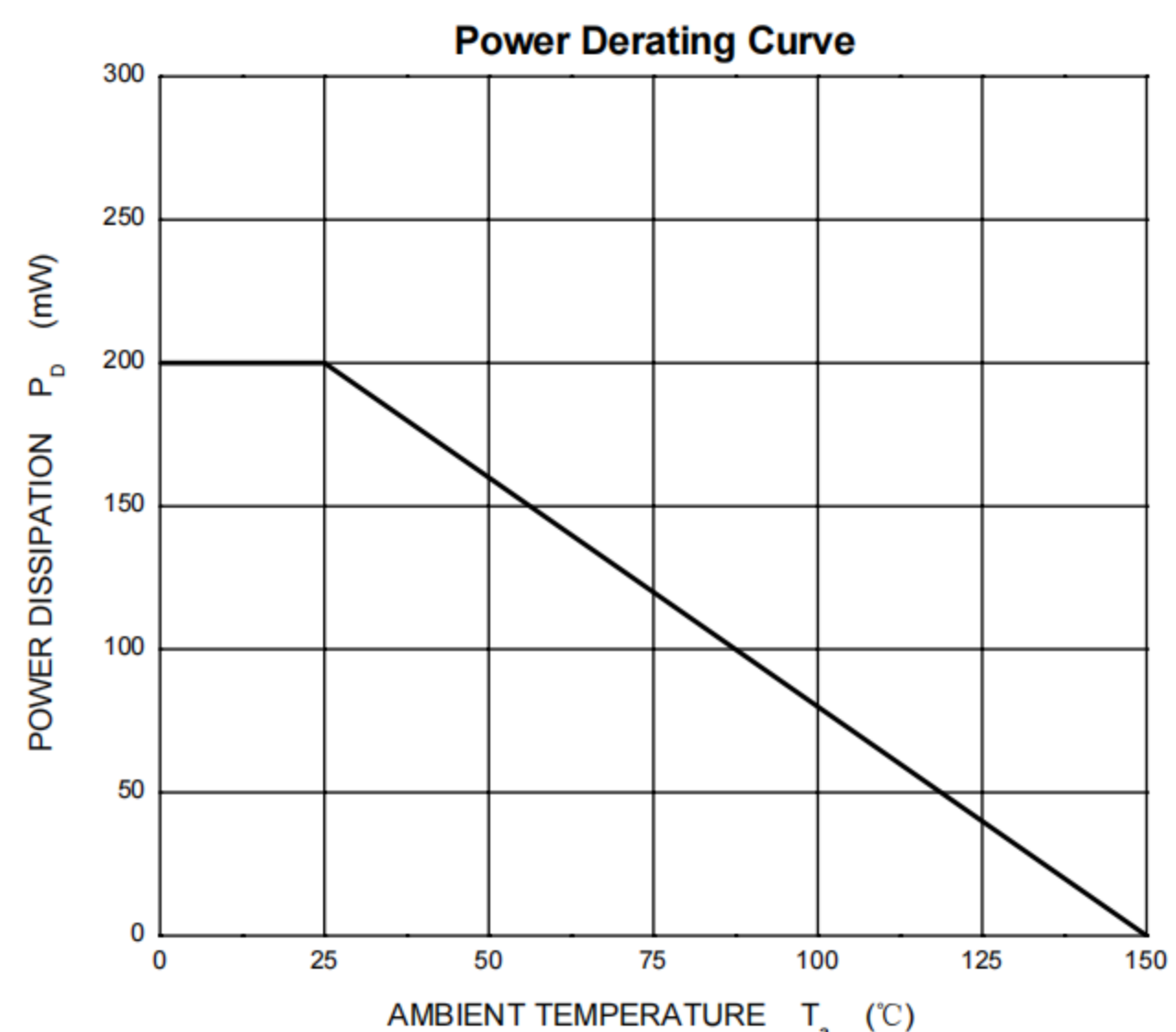
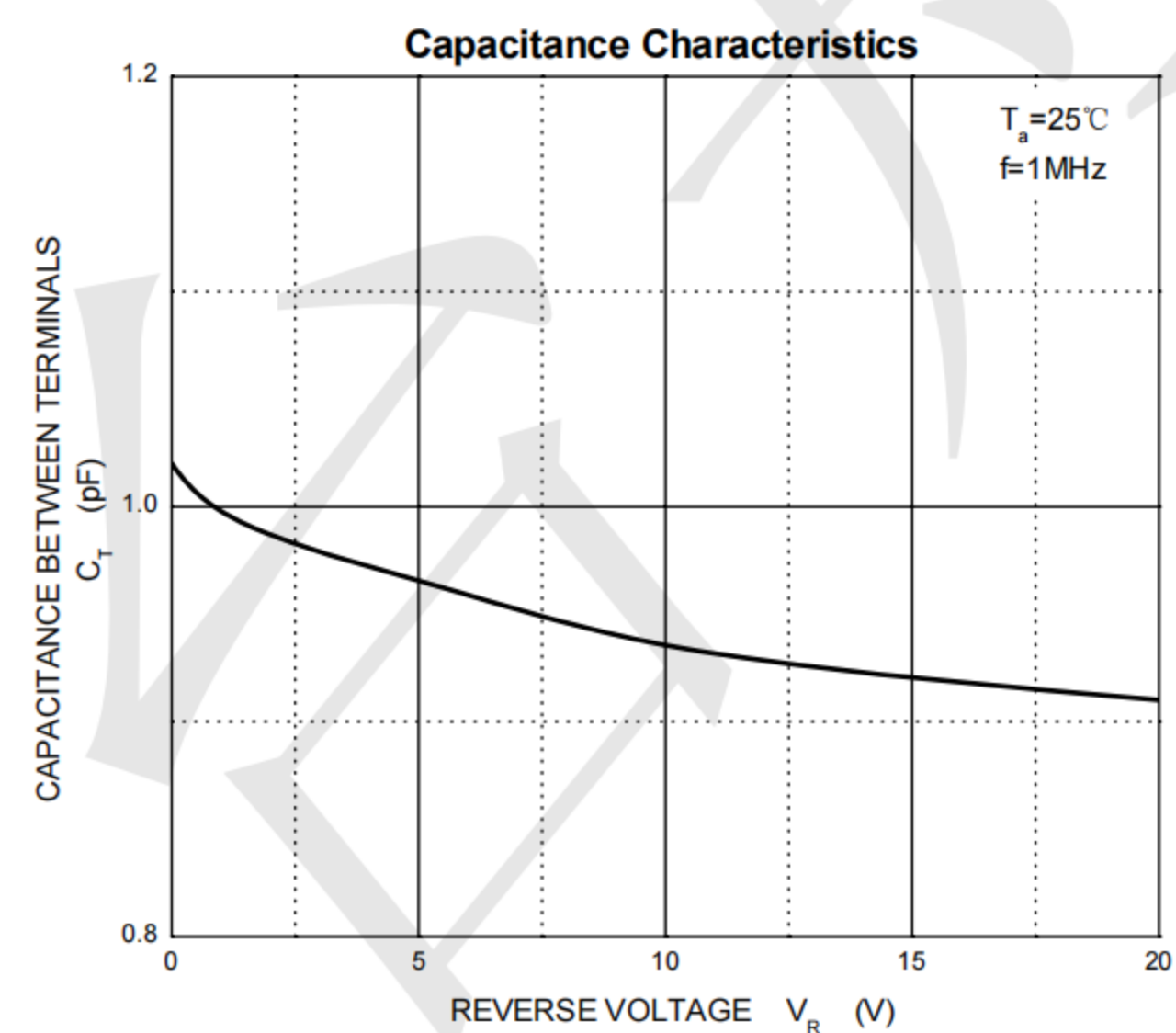
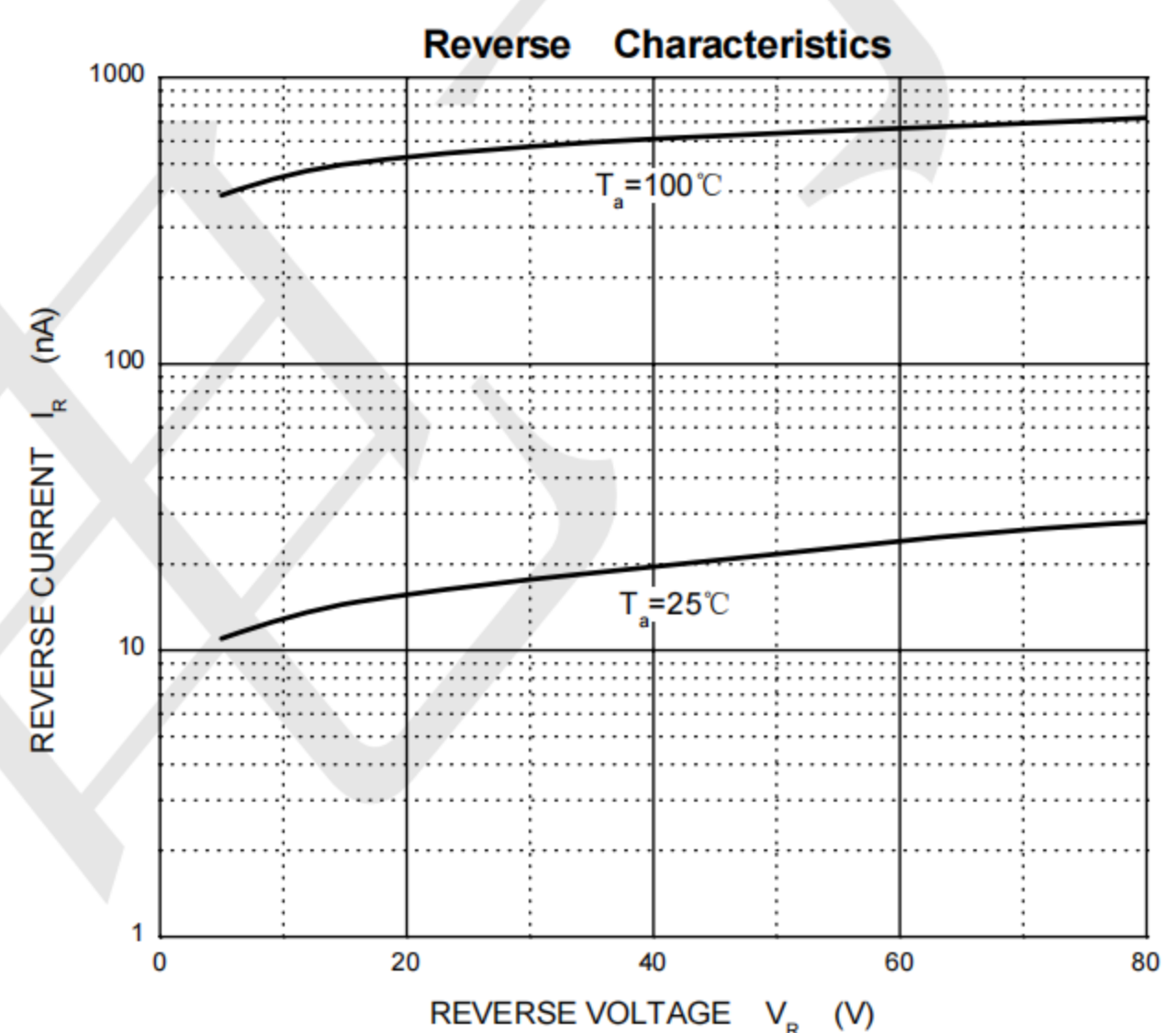
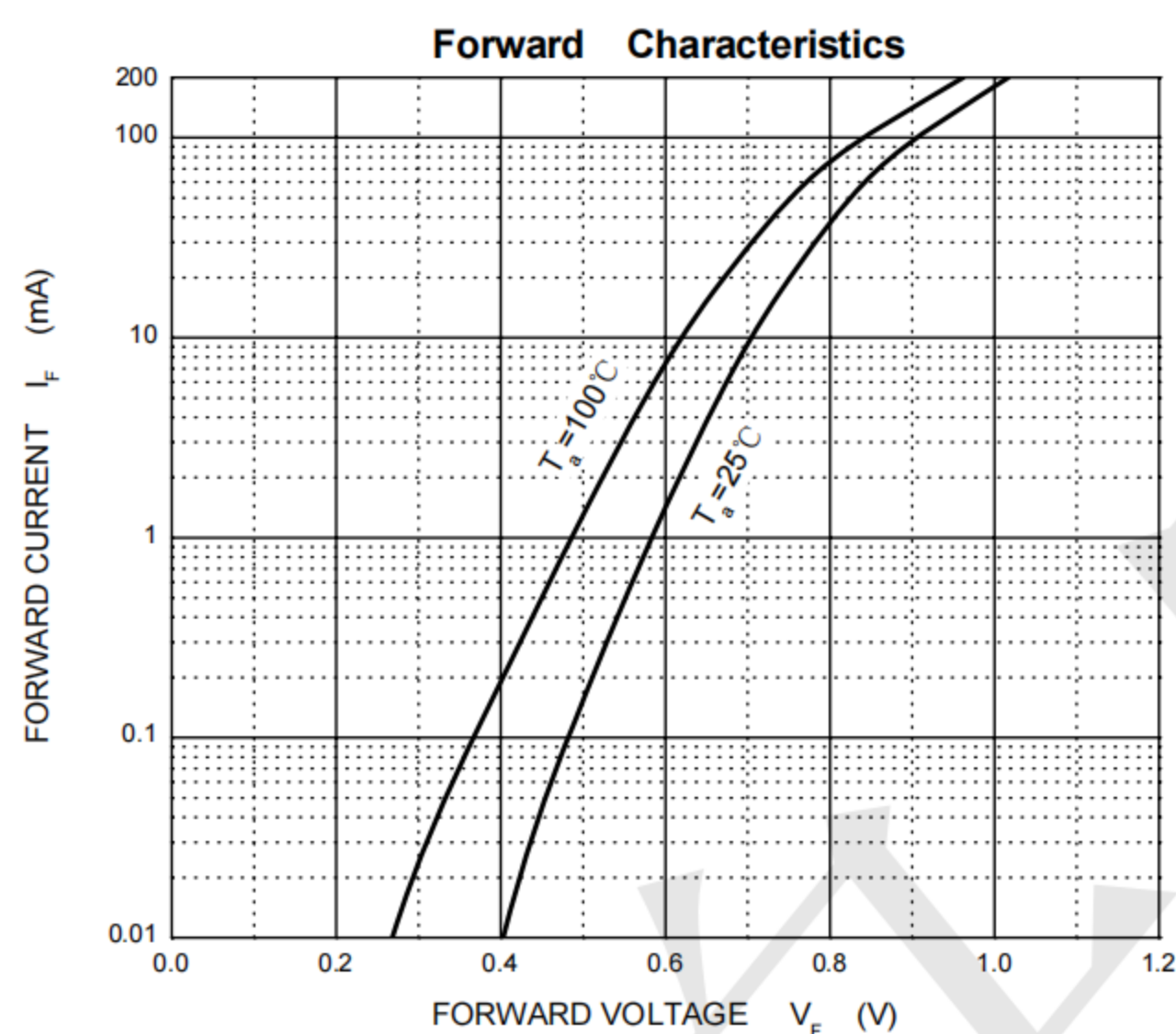
### Absolute Maximum Ratings ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

| Parameter                                       | Symbol          | Limit    | Unit                        |
|-------------------------------------------------|-----------------|----------|-----------------------------|
| Non-Repetitive Peak Reverse Voltage             | $V_{RM}$        | 100      | V                           |
| Peak Repetitive Peak Reverse Voltage            | $V_{RRM}$       | 100      | V                           |
| Working Peak Reverse Voltage                    | $V_{RWM}$       |          |                             |
| DC Blocking Voltage                             | $V_R$           |          |                             |
| RMS Reverse Voltage                             | $V_{R(RMS)}$    | 71       | V                           |
| Forward Continuous Current                      | $I_{FM}$        | 300      | mA                          |
| Average Rectified Output Current                | $I_O$           | 150      | mA                          |
| Peak Forward Surge Current @ $t=1.0\mu\text{s}$ | $I_{FSM}$       | 2.0      | A                           |
| @ $t=1.0\text{s}$                               |                 | 1.0      |                             |
| Power Dissipation                               | $P_d$           | 200      | mW                          |
| Thermal Resistance Junction to Ambient          | $R_{\theta JA}$ | 625      | $^{\circ}\text{C}/\text{W}$ |
| Junction Temperature                            | $T_j$           | 150      | $^{\circ}\text{C}$          |
| Storage Temperature                             | $T_{STG}$       | -55~+150 | $^{\circ}\text{C}$          |

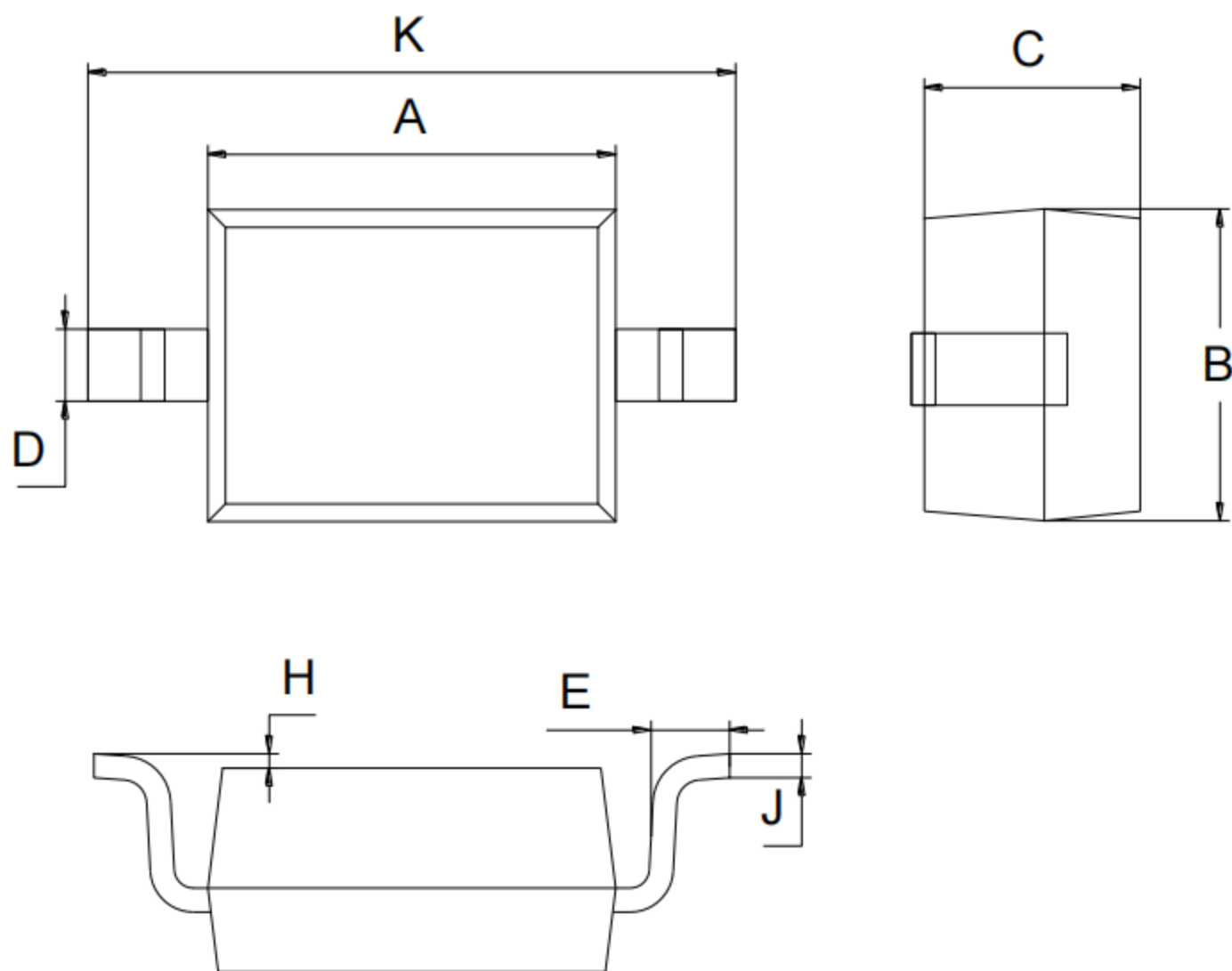
### Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter                     | Symbol   | Min | Typ | Max   | Unit          | Conditions                                              |
|-------------------------------|----------|-----|-----|-------|---------------|---------------------------------------------------------|
| Forward voltage               | $V_{F1}$ |     |     | 0.715 | V             | $I_F=1\text{mA}$                                        |
|                               | $V_{F2}$ |     |     | 0.855 | V             | $I_F=10\text{mA}$                                       |
|                               | $V_{F3}$ |     |     | 1.0   | V             | $I_F=50\text{mA}$                                       |
|                               | $V_{F4}$ |     |     | 1.25  | V             | $I_F=150\text{mA}$                                      |
| Reverse current               | $I_{R1}$ |     |     | 1     | $\mu\text{A}$ | $V_R=75\text{V}$                                        |
|                               | $I_{R2}$ |     |     | 25    | nA            | $V_R=20\text{V}$                                        |
| Capacitance between terminals | $C_T$    |     |     | 2     | pF            | $V_R=0\text{V}, f=1\text{MHz}$                          |
| Reverse recovery time         | $t_{rr}$ |     |     | 4     | ns            | $I_F=I_R=10\text{mA}$<br>$I_{rr}=0.1I_R, R_L=100\Omega$ |

### Typical Electrical Characteristic Curves



**Outline Drawing - SOD323** (unit: mm)



| SOD-323   |      |      |
|-----------|------|------|
| Dimension | Min. | Max. |
| A         | 1.60 | 1.80 |
| B         | 1.20 | 1.40 |
| C         | 0.80 | 0.90 |
| D         | 0.25 | 0.35 |
| E         | 0.22 | 0.42 |
| H         | 0.02 | 0.10 |
| J         | 0.05 | 0.15 |
| K         | 2.55 | 2.75 |

**Mounting Pad Layout-SOD323** (unit: mm)

