

► Features

- $V_R=100V$
- $I_{F(AV)}=150mA$
- Power Dissipation of 150mW
- Fast switching speed
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C

► Applications

For use in low voltage high frequency circuit signals.

► Mechanical Data

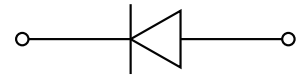
- Case: SOD-523
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

► Maximum Ratings (Ta=25°C Unless otherwise specified)

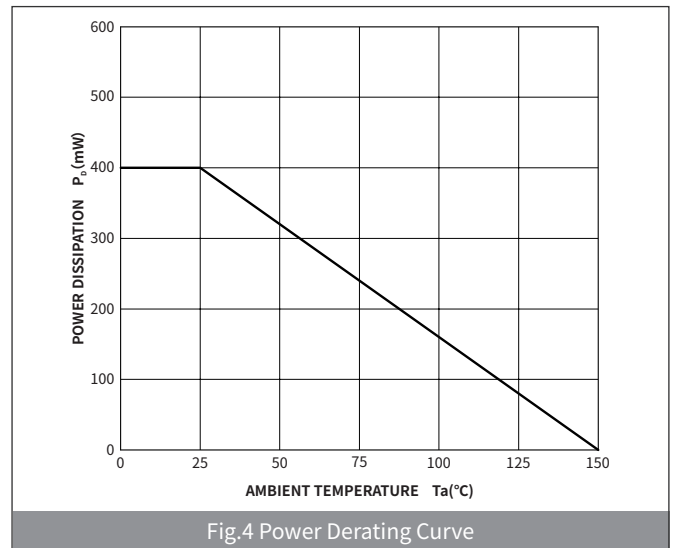
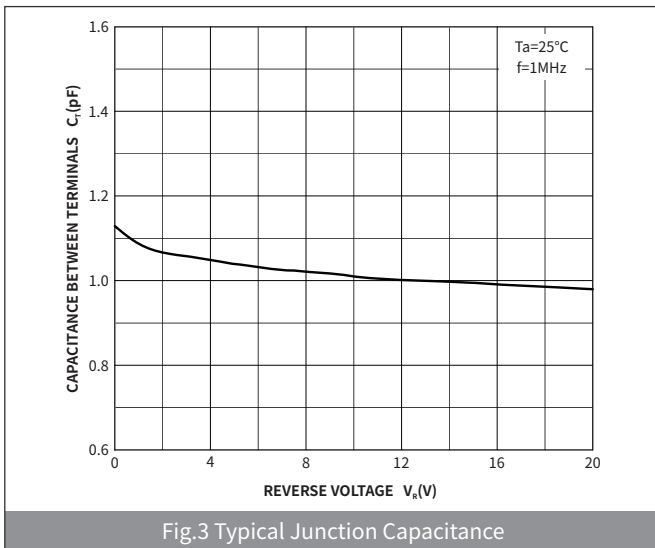
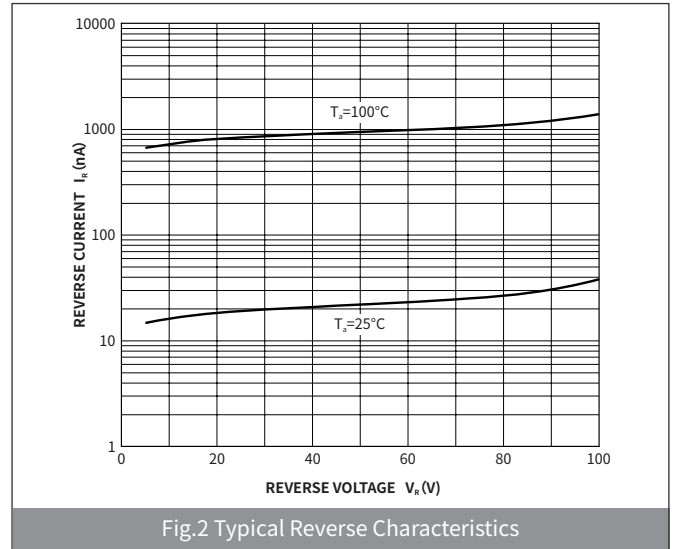
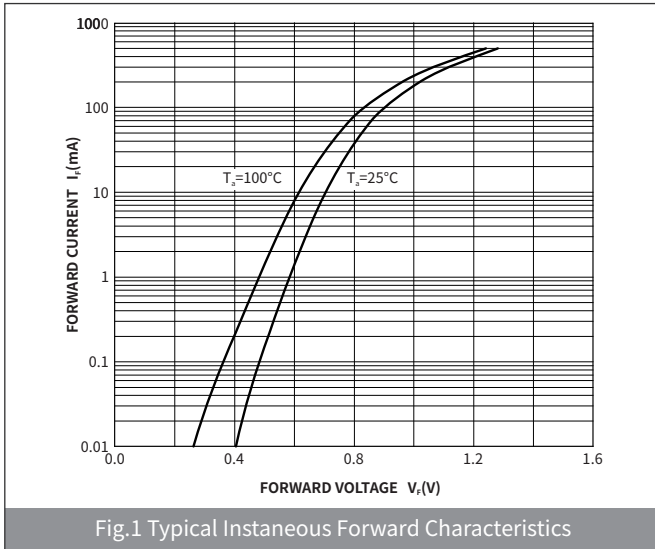
| PARAMETER | SYMBOL | UNIT | VALUE |
|--|------------------|-------|-----------|
| Maximum repetitive peak reverse voltage | V_{RRM} | V | 100 |
| Maximum RMS Voltage | V_{RMS} | V | 75 |
| Reverse Breakdown voltage @ $I_R=100\mu A$ | $V_{(BR)R}$ | V | 100 |
| Maximum Average Forward Rectified Current | $I_{F(AV)}$ | mA | 150 |
| Repetitive peak forward current | I_{FRM} | mA | 300 |
| Non-Repetitive Peak forward surge current @ $t_p=1.0\mu s$ | I_{FSM} | A | 2.0 |
| Non-Repetitive Peak forward surge current @ $t_p=1.0s$ | | | 1.0 |
| Power Dissipation | P_d | mW | 150 |
| Storage temperature | T_{stg} | °C | -55 ~+150 |
| Junction temperature | T_j | °C | -55 ~+150 |
| Typical thermal resistance | $R_{\theta J-A}$ | °C /W | 833 |

► Electrical Characteristics (Ta=25°C Unless otherwise specified)

| PARAMETER | TEST CONDITIONS | SYMBOL | UNIT | Min | Max |
|---------------------------------------|--|----------|---------|-----|-------|
| Maximum instantaneous forward voltage | $I_F=1.0mA$ | V_F | V | — | 0.715 |
| | $I_F=10mA$ | | | — | 0.855 |
| | $I_F=50mA$ | | | — | 1.0 |
| | $I_F=150mA$ | | | — | 1.25 |
| Reverse Leakage Current | $V_R=20V$ | I_{R1} | nA | — | 25 |
| | $V_R=75V$ | I_{R2} | μA | — | 1.0 |
| Total capacitance | $V_R=0V, f=1MHz$ | C_T | pF | — | 2.0 |
| Maximum reverse recovery time | $I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$ | T_{rr} | ns | — | 4.0 |

SOD-523


► **Ratings And Characteristics Curves** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

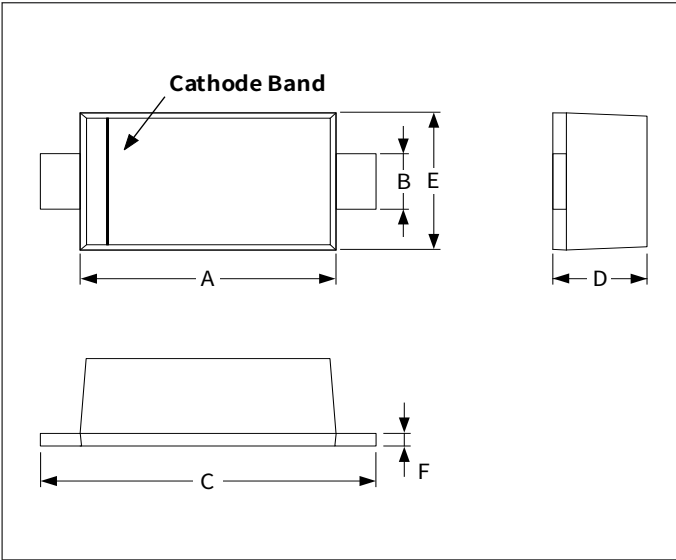


► **Ordering Information**

| PACKAGE | PACKAGE CODE | UNIT WEIGHT(g) | REEL(pcs) | BOX(pcs) | CARTON(pcs) | DELIVERY MODE |
|---------|--------------|----------------|-----------|----------|-------------|---------------|
| SOD-523 | R1 | 0.002 | 3000 | 45000 | 180000 | 7" |

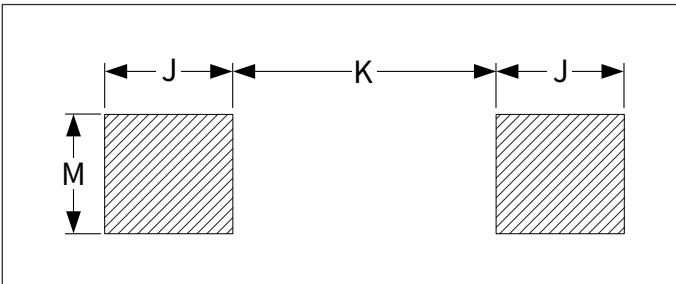
► **Package Outline Dimensions (SOD-523)**

| Symbol | Dimensions | | | |
|--------|-------------|------|--------|-------|
| | Millimeters | | Inches | |
| | Min | Max | Min | Max |
| A | 1.10 | 1.30 | 0.044 | 0.052 |
| B | 0.25 | 0.35 | 0.01 | 0.014 |
| C | 1.50 | 1.70 | 0.06 | 0.068 |
| D | 0.50 | 0.70 | 0.02 | 0.028 |
| E | 0.70 | 0.90 | 0.028 | 0.036 |
| F | 0.05 | 0.20 | 0.002 | 0.008 |



► **Suggested Pad Layout**

| Symbol | Dimensions | | | |
|--------|-------------|------|--------|-------|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| J | 0.60 | - | 0.023 | - |
| K | - | 1.10 | - | 0.042 |
| M | 0.80 | - | 0.031 | - |



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Diodes - General Purpose, Power, Switching category:](#)

Click to view products by [hongjiacheng manufacturer:](#)

Other Similar products are found below :

[MMBD3004S-13-F](#) [1N3611](#) [NTE156A](#) [NTE6244](#) [1SS400CST2RA](#) [SDAA13](#) [SHN2D02FUTW1T1G](#) [1N4449](#) [1N456A](#) [1N914BTR](#)
[D291S45T](#) [BAS 16-02L E6327](#) [BAS 16-02V H6327](#) [BAS 21U E6327](#) [BAS 28 E6327](#) [BAW56DWQ-7-F](#) [BAW75-TAP](#) [MM230L-CAA](#)
[IDW40E65D1](#) [JAN1N3600](#) [JAN1N4454UR-1](#) [SMMSD4148T3G](#) [BYW95B/A52A](#) [NSVDAN222T1G](#) [CDSZC01100-HF](#) [BAV70HDW-7](#)
[BAS28-7](#) [JANTX1N6640](#) [BAW56HDW-13](#) [BAS28 TR](#) [VS-HFA04SD60STR-M3](#) [1SS388-TP](#) [BAV99TQ-13-F](#) [BAV99HDW-13](#) [1N4004](#)
[MMDB30-E28X](#) [LS4148](#) [IDV15E65D2](#) [W0503RH200S0L](#) [W0503SH200S0L](#) [M0268SJ200NLF](#) [M0268RJ200NLF](#) [S3MBF](#) [US1J](#)
[DAN217U-TP](#) [SHV-06JNS-Q](#) [IDW30C65D1](#) [IDW80C65D1](#) [VS-HFA30TA60CSR-M3](#) [M1MA152WAT1](#)