



Features

- Peak Forward Current: $I_{FM}=350$ mA
- Power Dissipation of 200mw

Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|--------------|---------|---------|----------|
| SD103AWS-7-F | SOD-323 | S4 | 3000 |
| SD103BWS-7-F | SOD-323 | S5 | 3000 |
| SD103CWS-7-F | SOD-323 | S6 | 3000 |



SOD-323



Maximum Ratings (Ta=25°C unless otherwise noted)

| Parameter | Symbol | SD103AWS-7-F | SD103BWS-7-F | SD103AWS-7-F | Unit |
|--|-----------------|--------------|--------------|--------------|------|
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | | | | |
| Working Peak Reverse Voltage | V_{RWM} | 40 | 30 | 20 | V |
| DC Blocking Voltage | V_R | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 28 | 21 | 14 | V |
| Forward Continuous Current | I_{FM} | | 350 | | mA |
| Non-repetitive Peak Forward Surge Current @t=8.3ms | I_{FSM} | | 2.0 | | A |
| Power Dissipation | P_d | | 200 | | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | | 500 | | °C/W |
| Junction Temperature | T_j | | -40~+125 | | °C |
| Storage Temperature | T_{STG} | | -55~+150 | | °C |

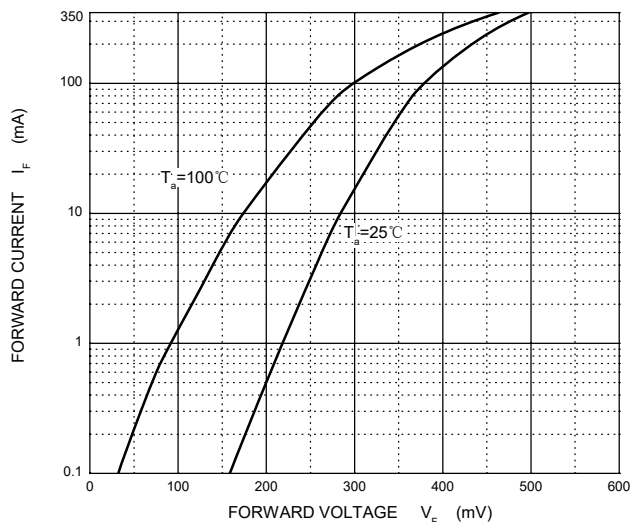
Electrical Characteristics(Ta=25°C unless otherwise specified)

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|------------|-----|-----|--------------|---------|---|
| Reverse breakdown voltage | | | | | | |
| SD103AWS-7-F | $V_{(BR)}$ | 40 | | | V | $I_R=100\mu A$ |
| SD103BWS-7-F | | 30 | | | | $I_R=100\mu A$ |
| SD103CWS-7-F | | 20 | | | | $I_R=100\mu A$ |
| Forward voltage | V_F | | | 0.37 0.60 | V | $I_F=20mA$ $I_F=200mA$ |
| Reverse current | I_{RM} | | | 5.0 | μA | $V_R=30V$ $V_R=20V$ $V_R=10V$ |
| Capacitance between terminals | C_T | | | 50 | pF | $R=0V, f=1.0MHz$ |
| Reverse recovery time | t_{rr} | | 10 | | ns | $I_F=I_R=200mA$ $I_{rr}=0.1I_R, R_L=100\Omega$ |

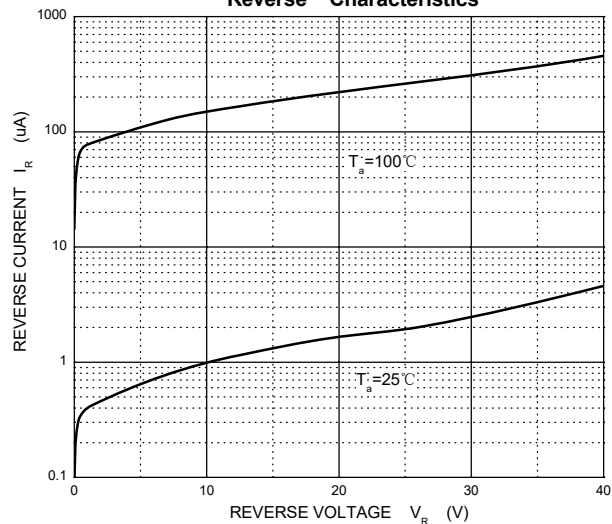


Typical Characteristics

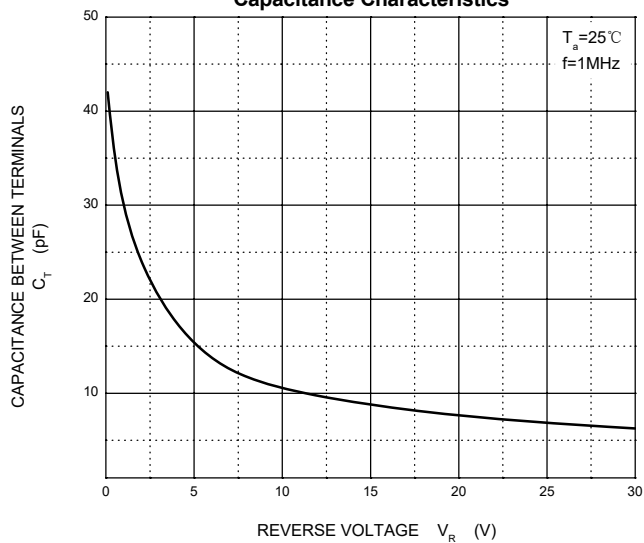
Forward Characteristics



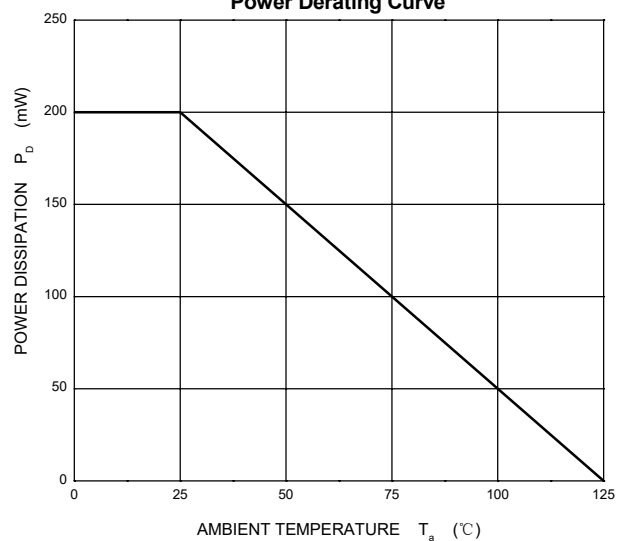
Reverse Characteristics



Capacitance Characteristics



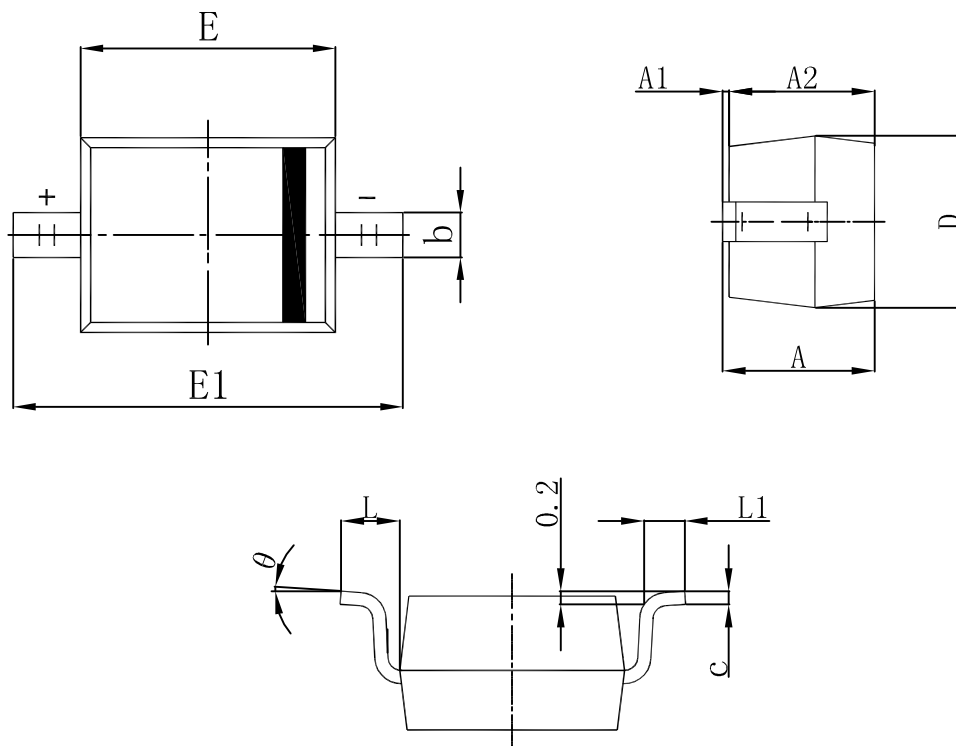
Power Derating Curve





Package Outline Dimensions

SOD-323



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | | 1.100 | | 0.043 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.800 | 1.000 | 0.031 | 0.039 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 1.200 | 1.400 | 0.047 | 0.055 |
| E | 1.600 | 1.800 | 0.063 | 0.071 |
| E1 | 2.500 | 2.750 | 0.098 | 0.108 |
| L | 0.475 REF | | 0.019 REF | |
| L1 | 0.250 | 0.400 | 0.010 | 0.016 |
| θ | 0° | 8° | 0° | 8° |



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