

## Silicon Epitaxial Planar Diode

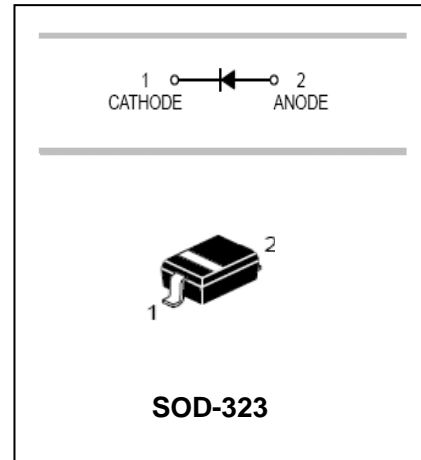
## SD107WS

### FEATURES

- Low forward voltage drop.
- Guard ring die construction for transient protection.
- Ideal for low logic level applications.
- Low capacitance.



Lead-free



### APPLICATIONS

- Schottky barrier switching

### ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| SD107WS  | SG      | SOD-323      |

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Parameter   | Symbol          | Limits   | Unit |
|---|-----------------|----------|------|
| Peak Repetitive reverse voltage                             | $V_{RRM}$       | 30       | V    |
| RMS Reverse Voltage   | $V_{R(RMS)}$    | 21       | V    |
| Forward continuous Current                                  | $I_F$           | 100      | mA   |
| Non-Repetitive Peak Forward Surge Current @ $t_p \leq 10ms$ | $I_{FSM}$       | 750      | mA   |
| Power dissipation   | $P_d$           | 250      | mW   |
| Thermal resistance junction to ambient air                  | $R_{\theta JA}$ | 500      | °C/W |
| Junction temperature  | $T_j$           | 150      | °C   |
| Storage temperature   | $T_{STG}$       | -65~+150 | °C   |

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Parameter                     | Symbol | Min. | Typ. | Max. | Unit    | Conditions        |
|-------------------------------|--------|------|------|------|---------|-------------------|
| Reverse breakdown voltage     | $V_R$  | 30   |      |      | V       | $I_R=100\mu A$    |
| Forward voltage               | $V_F$  |      | 300  |      | mV      | $I_F=2mA$         |
|                               |        |      | 360  |      |         | $I_F=15mA$        |
|                               |        |      | 470  | 550  |         | $I_F=50mA$        |
|                               |        |      | 580  | 800  |         | $I_F=100mA$       |
| Reverse current               | $I_R$  |      |      | 1.0  | $\mu A$ | $V_R=25V$         |
| Capacitance between terminals | $C_T$  |      |      | 7    | pF      | $V_R=10V, f=1MHz$ |

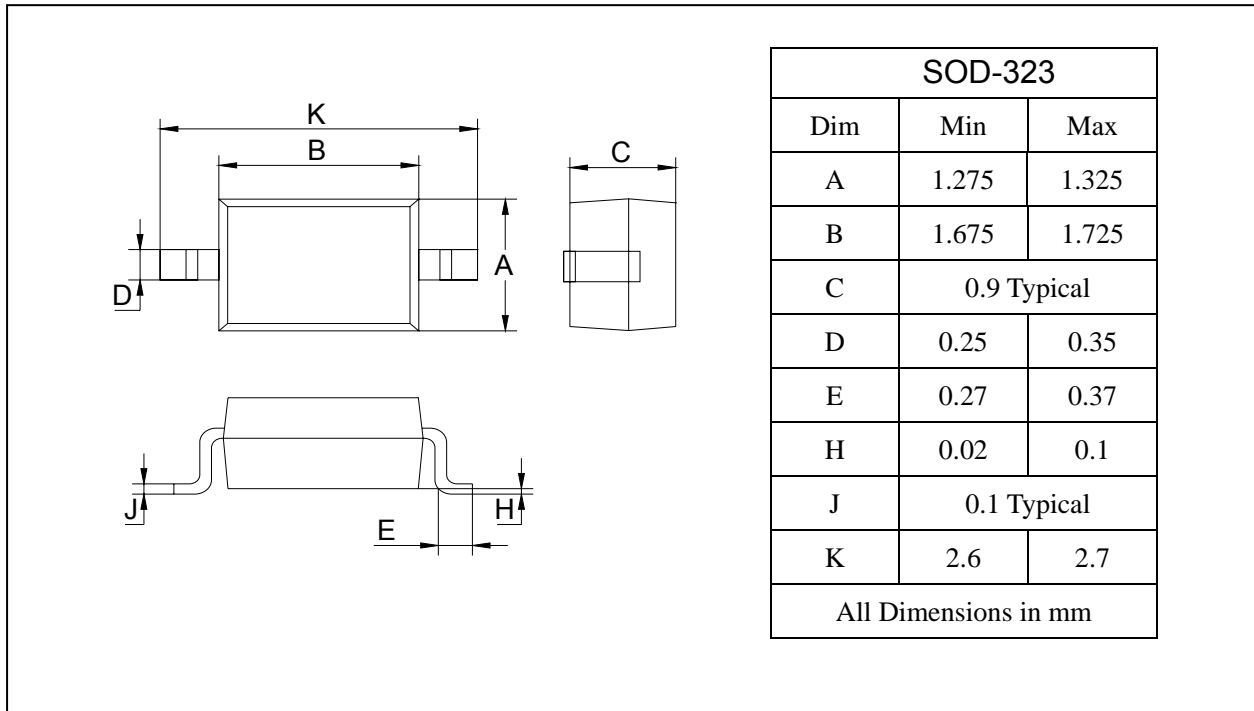
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## SD107WS

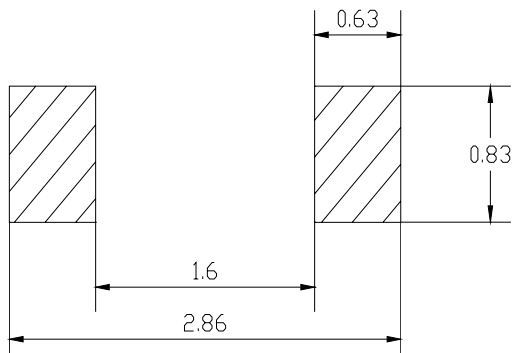
### PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



### SOLDERING FOOTPRINT



Unit : mm

### PACKAGE INFORMATION

| Device  | Package | Shipping       |
|---------|---------|----------------|
| SD106WS | SOD-323 | 3000/Tape&Reel |