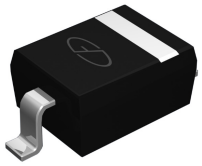
GOOD-ARK
SEMICONDUCTOR

# GDB581xWS
# Surface Mount Schottky Rectifier

## Features

- Low forward voltage drop
- High conductance
- Lead free
- SMD package
- Ideal for low voltage rectification, DC/DC converter



SOD-323

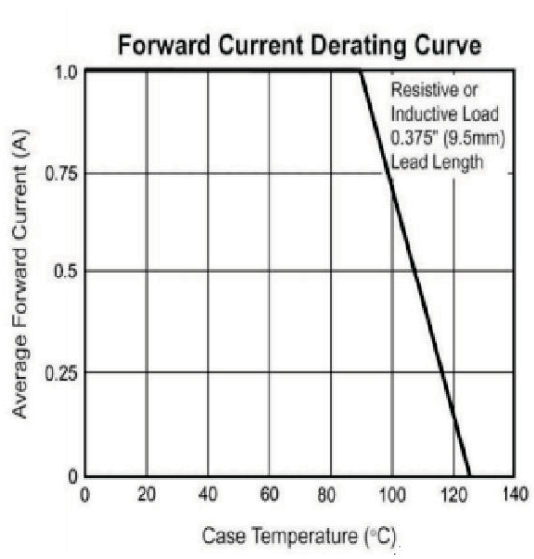
## Absolute Maximum Ratings ($T_A$=25°C unless otherwise specified)

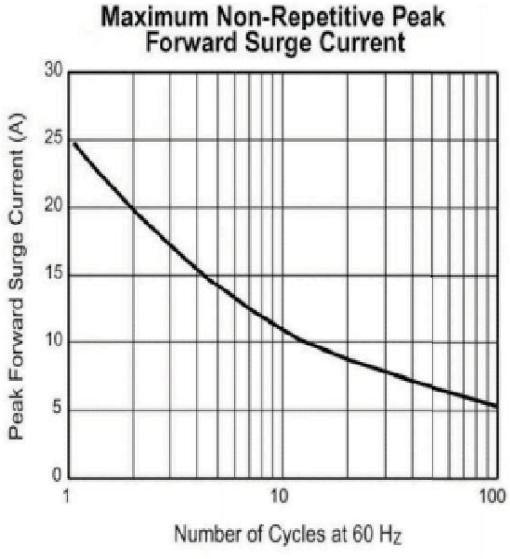
| Symbol | GDB5817WS | GDB5818WS | GDB5819WS | Unit |
|---|---|---|---|---|
| $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 20 | 30 | 40 | V |
| $V_{R(RMS)}$ | 14 | 21 | 28 | V |
| $I_F$ | 1 | | | A |
| $I_{FSM}$ | 25 | | | A |
| $P_d$ | 200 | | | mW |
| $R_{\theta JA}$ | 500 | | | °C /W |
| $T_J$, $T_{STG}$ | -65 to 125 | | | °C |

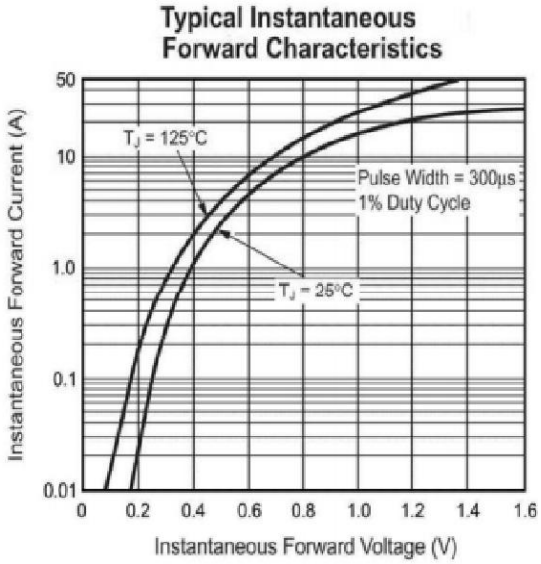
## Electrical Characteristics ($T_A$=25°C unless otherwise specified)

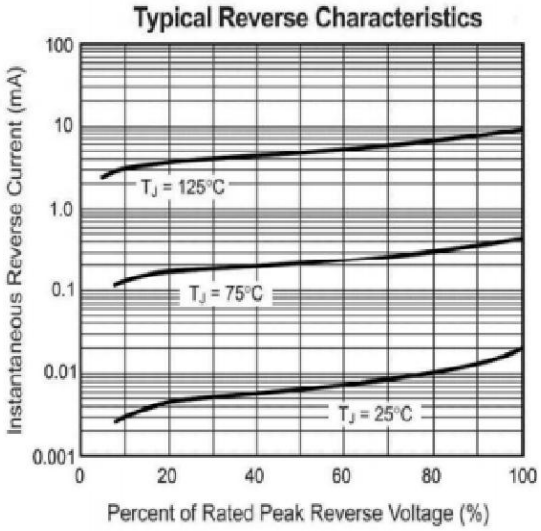
| Symbol | Conditions | GDB5817WS | | GDB5818WS | | GDB5819WS | | Unit |
|---|---|---|---|---|---|---|---|---|
| | | Min | Max | Min | Max | Min | Max | |
| $V_{(BR)}$ | $I_R$=1mA | 20 | | 30 | | 40 | | V |
| $V_F$ | $I_F$=0.1A | | 0.32 | | 0.35 | | 0.40 | V |
| | $I_F$=1A | | 0.45 | | 0.55 | | 0.60 | |
| | $I_F$=3A | | 0.75 | | 0.80 | | 0.90 | |
| $I_{RM}$ | $V_R$=$V_{RRM}$ | | 1 | | | | | mA |
| $C_J$ | $V_R$=4V,f=1.0MHZ | | 120 | | | | | pF |

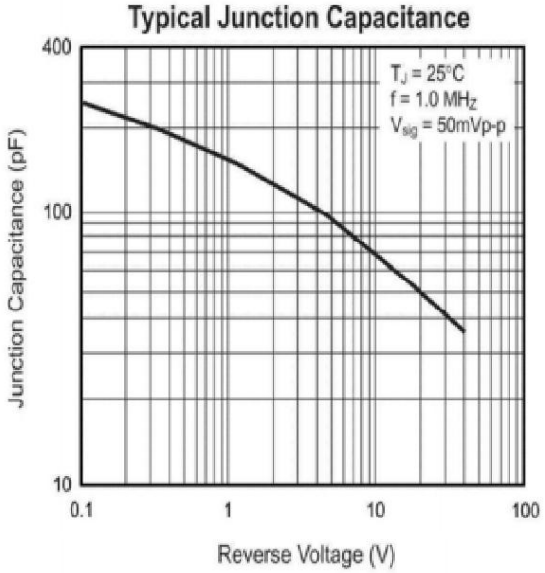
## Typical Characteristic Curves

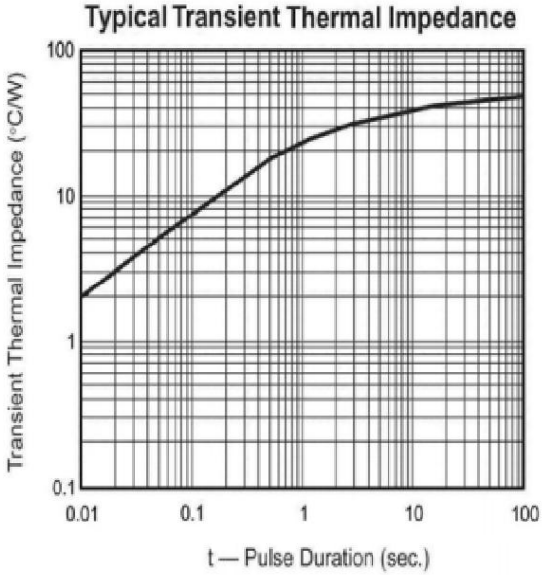


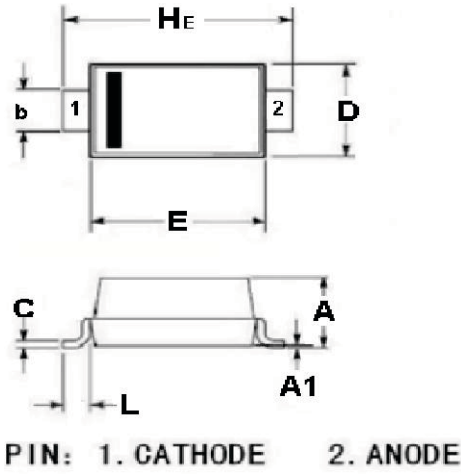



## Package Outline Dimensions (in mm)




| | SOD-323 | |
|---|---|---|
| | Min | Max |
| A | 0.80 | 1.00 |
| A1 | 0.00 | 0.10 |
| b | 0.25 | 0.40 |
| C | 0.09 | 0.177 |
| D | 1.15 | 1.35 |
| E | 1.60 | 1.80 |
| HE | 2.30 | 2.70 |
| L | 0.20 | 0.40 |

## Marking

| MPN | GDB5817WS | GDB5818WS | GDB5819WS |
|---|---|---|---|
| Marking | SJ | SK | SL |