## SHB20U100S

## Surface Mount Schottky Barrier Rectifier

## Features

- Low forward voltage
- High efficiency operation


1.Anode 2.Anode 3.Cathode TO-277 Plastic Package

Absolute Maximum Ratings $\left(\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}\right)$

| Parameter | Symbol | Value | Unit |
| :--- | :---: | :---: | :---: |
| Repetitive Peak Reverse Voltage | $\mathrm{V}_{\mathrm{RRM}}$ | 100 | V |
| Reverse Voltage | $\mathrm{V}_{\mathrm{R}}$ | 100 | V |
| Average Rectified Forward Current | $\mathrm{I}_{\mathrm{F}(\mathrm{AV})}$ | 20 | A |
| Non-repetitive Peak Forward Surge Current $(\mathrm{t}=8.3 \mathrm{~ms})$ | $\mathrm{I}_{\mathrm{FSM}}$ | 250 | A |
| Junction Temperature Range | $\mathrm{T}_{\mathrm{J}}$ | -50 to +150 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\text {stg }}$ | -50 to +150 | ${ }^{\circ} \mathrm{C}$ |

Characteristics at $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Max. | Unit |
| :---: | :---: | :---: | :---: |
| Forward Voltage |  |  |  |
| at $I_{F}=3 \mathrm{~A}$ |  | 0.49 |  |
| at $I_{F}=10 \mathrm{~A}$ | $V_{F}$ | 0.6 | V |
| at $I_{F}=12 \mathrm{~A}$ |  | 0.67 |  |
| at $I_{F}=20 \mathrm{~A}$ |  | 0.75 |  |
| Reverse Current |  |  |  |
| at $V_{R}=100 \mathrm{~V}$ | $\mathrm{I}_{R}$ | 60 | $\mu \mathrm{~A}$ |

## SHB20U100S

## Electrical characteristic curves

Fig 1. Reverse Characteristic Curve
Fig 2. Forward Characteristic Curve



Fig 3. Junction Capacitance


## SHB20U100S

## PACKAGE OUTLINE

Plastic surface mounted package (Units: mm)


## Recommended Soldering Footprint



Packing information

| Package | Tape Width <br> $(\mathrm{mm})$ | Pitch |  | Reel Size |  | Per Reel Packing Quantity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | mm | inch | mm | inch |  |
| TO-277 | 12 | $8 \pm 0.1$ | $0.315 \pm 0.004$ | 330 | 13 | 5,000 |

## Marking information

" ******** " = Part No.
" YYWW " = Date Code Marking
" Y " = Year (ex: 19 = 2019)
" W " = Week (ex: 09 = the 9th week of the year)


Font type: Arial


