## BAS70WS SMALL SIGNAL SCHOTTKY DIODE

## Features

- Low forward voltage drop

PINNING

| PIN | DESCRIPTION |
| :---: | :--- |
| 1 | Cathode |
| 2 | Anode |



Top View
Marking Code: "SX" Simplified outline SOD-323 and symbol

Absolute Maximum Ratings ( $\mathrm{T}_{\mathrm{a}}=\mathbf{2 5}$ 。C)

| Parameter | Symbol | Value | Unit |
| :--- | :---: | :---: | :---: |
| Repetitive Peak Reverse Voltage | $\mathrm{V}_{\text {RRM }}$ | 70 | V |
| Continuous Forward Current | $\mathrm{I}_{\mathrm{F}}$ | 70 | mA |
| Surge Non-Repetitive Forward Current (tp $=10 \mathrm{~ms})$ | $\mathrm{I}_{\text {FSM }}$ | 1 | A |
| Total Power Dissipation | $\mathrm{P}_{\mathrm{tot}}$ | 230 | mW |
| Thermal Resistance Junction to Ambient ${ }^{1)}$ | $\mathrm{R}_{\mathrm{ttJA}}$ | 543 | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Junction Temperature | $\mathrm{T}_{\mathrm{J}}$ | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\text {stg }}$ | -65 to +150 | ${ }^{\circ} \mathrm{C}$ |

${ }^{1)}$ Mounted on epoxy board, with r comm nd d pad layout.

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

| Parameter | Symbol | Min. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: |
| Reverse Breakdown Voltage <br> at $I_{R}=10 \mu \mathrm{~A}$ | $\mathrm{~V}_{\mathrm{BR}}$ | 70 | - | V |
| Forward Voltage <br> at $\mathrm{I}_{\mathrm{F}}=1 \mathrm{~mA}$ | $\mathrm{~V}_{\mathrm{F}}$ | - | 410 | mV |
| Reverse Current <br> at $\mathrm{V}_{\mathrm{R}}=50 \mathrm{~V}$ | $\mathrm{I}_{\mathrm{R}}$ | - | 100 | nA |
| Diode Capacitance <br> at $\mathrm{V}_{\mathrm{R}}=0 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ | $\mathrm{C}_{\text {tot }}$ | - | 2 | pF |

## Typical Characteristics



Fig. 1 Forward current as a function of forward voltage; typical values.


Fig. 3 Differential forward resistance as a function


Fig. 2 Reverse current as a function of reverse v ltage; typical values.


Fig. 4 Diode capacitance as a function of reverse

## PACKAGE OUTLINE



