## BAS70WS

## SMALL SIGNAL SCHOTTKY DIODE

## Features

- Low forward voltage drop

PINNING

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



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

| 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 | $\mathrm{P}_{\text {tot }}$ | 230 | mW |
| Thermal Resistance Junction to Ambient ${ }^{1)}$ | $\mathrm{R}_{\text {thJA }}$ | 550 | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Junction Temperature | $\mathrm{T}_{J}$ | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\mathrm{s}}$ | -65 to +150 | ${ }^{\circ} \mathrm{C}$ |

${ }^{1)}$ Mounted on epoxy board, with recommended 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 |



Reverse leakage current versus junction temperature (typical values).



Junction capacitance versus reverse voltage applied (typical values).



## PACKAGE OUTLINE



| UNIT | A | $\mathrm{b}_{\mathrm{p}}$ | C | D | E | $\mathrm{H}_{\mathrm{E}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| mm | 1.10 | 0.40 | 0.15 | 1.80 | 1.35 | 2.80 |
|  | 0.80 | 0.25 | 0.00 | 1.60 | 1.15 | 2.30 |

