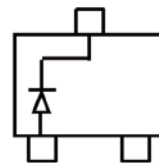


## Features

- Low turn-on voltage
- Fast switching
- Also available in lead free version



SOT-323



Equivalent Circuit

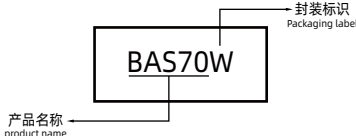
## Absolute Maximum Ratings(TA=25℃)

| Symbol          | Parameter                                       | Value    | Uniat |
|-----------------|-------------------------------------------------|----------|-------|
| $V_R$           | DC Blocking Voltage                             | 70       | V     |
| $I_F$           | Forward Continuous Current                      | 70       | mA    |
| $I_{FSM}$       | Non-repetitive Peak Forward Surge Current@8.3mS | 100      | mA    |
| $P_d$           | Power Dissipation                               | 200      | mW    |
| $R_{\theta JA}$ | Thermal Resistance From Junction To Ambient     | 500      | ℃/W   |
| $T_J$           | Operating Junction Temperature Range            | -40~+125 | ℃     |
| $T_{stg}$       | Storage Temperature Range                       | -55~+150 | ℃     |

## Electrical Characteristics (TA=25℃ unless otherwise specified)

| Symbol     | Parameter                 | Test conditions                              | Min | Max  | Unit |
|------------|---------------------------|----------------------------------------------|-----|------|------|
| $V_{(BR)}$ | Reverse breakdown voltage | $I_R=10\mu A$                                | 70  |      | V    |
| $I_R$      | Reverse current           | $V_R=50V$                                    |     | 100  | nA   |
| $V_F$      | Forward voltage           | $I_F=1mA$                                    |     | 410  | mV   |
|            |                           | $I_F=15mA$                                   |     | 1000 | mV   |
| $C_D$      | Diode capacitance         | $V_R=0V, f=1MHz$                             |     | 2    | pF   |
| $t_{rr}$   | Reverse recovery time     | $I_F=I_R=10mA, I_{rr}=0.1I_R, R_L=100\Omega$ |     | 5    | nS   |

## Ordering information

| Product ID | Marking | Naming rule                                                                          | Pack    | Qty(PCS) |
|------------|---------|--------------------------------------------------------------------------------------|---------|----------|
| BAS70W     | K73     |  | SOT-323 | 3000     |

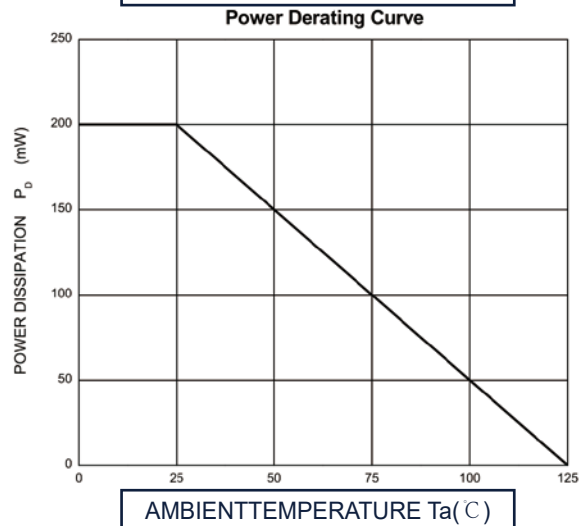
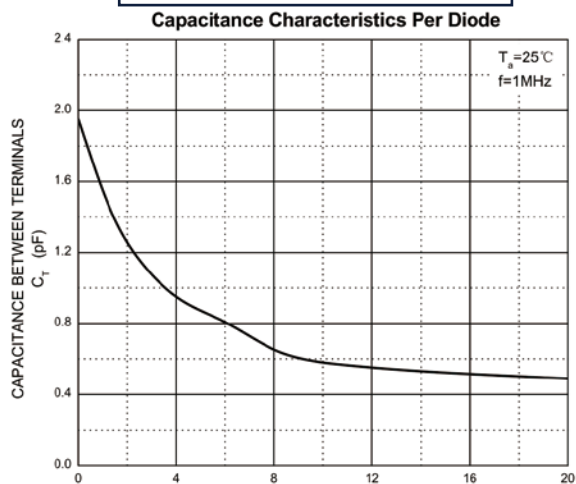
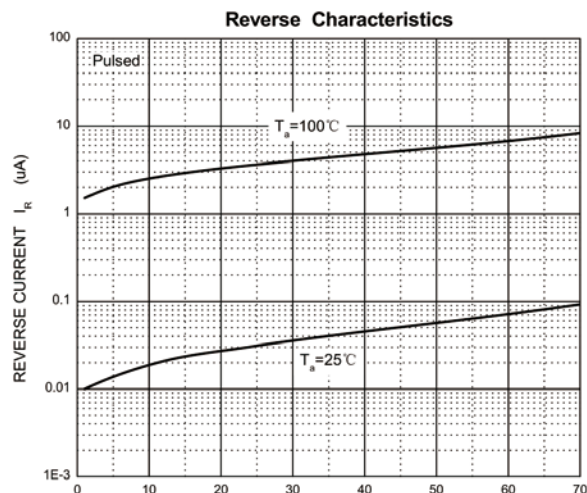
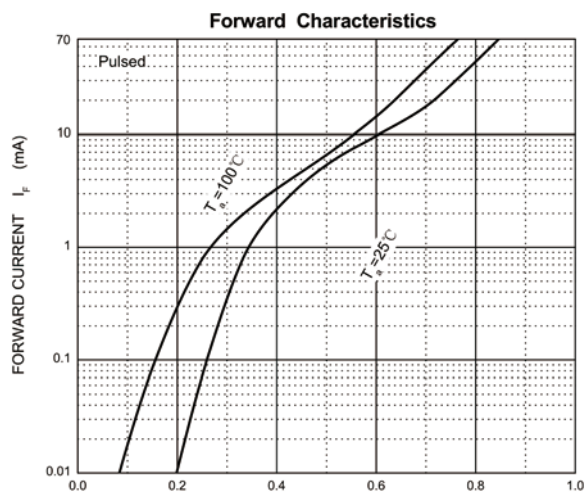


TWTLSEMI

# TL-BAS70W

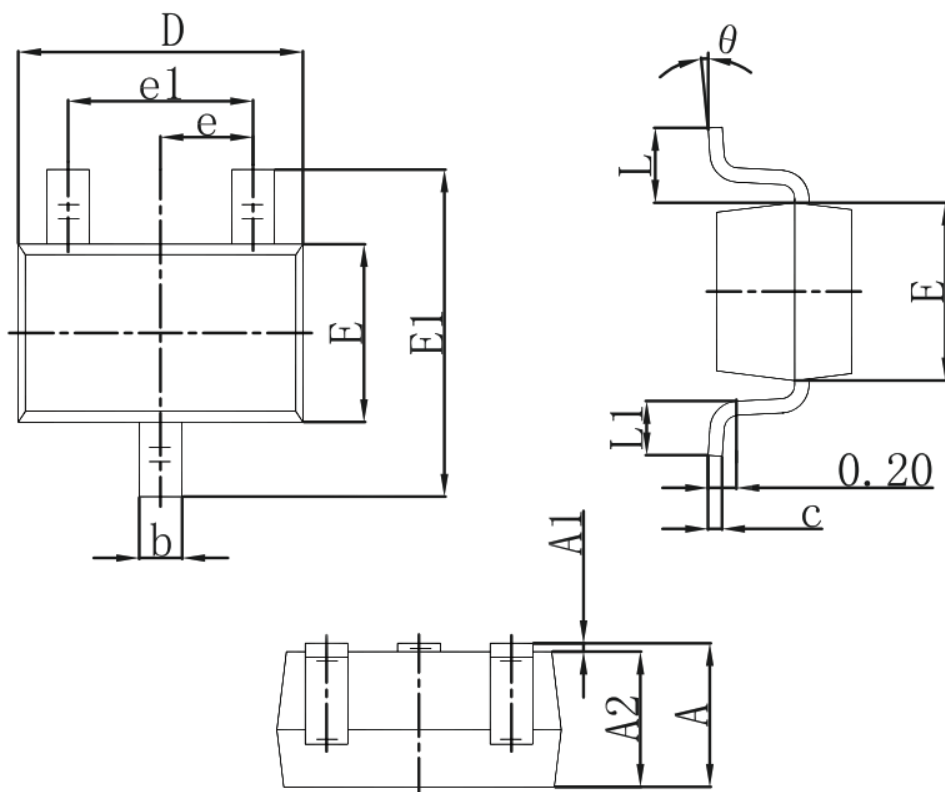
SOT-323 SCHOKKTY BARRIER DIODE

## Typical Characteristics





## SOT-323 Package Outline Dimensions



| Symbol   | Dimensions in Millimeters |       | Dimensions In Inches |       |
|----------|---------------------------|-------|----------------------|-------|
|          | Min                       | Max   | Min                  | Max   |
| A        | 0.900                     | 1.100 | 0.035                | 0.043 |
| A1       | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2       | 0.900                     | 1.000 | 0.035                | 0.039 |
| b        | 0.200                     | 0.400 | 0.008                | 0.016 |
| c        | 0.080                     | 0.150 | 0.003                | 0.006 |
| D        | 2.000                     | 2.200 | 0.079                | 0.087 |
| E        | 1.150                     | 1.350 | 0.045                | 0.053 |
| E1       | 1.350                     | 2.450 | 0.085                | 0.096 |
| e        | 0.650 TYP                 |       | 0.026 TYP            |       |
| e1       | 1.200                     | 1.400 | 0.047                | 0.055 |
| L        | 0.525 REF                 |       | 0.021 REF            |       |
| L1       | 0.260                     | 0.460 | 0.010                | 0.018 |
| $\theta$ | 0°                        | 8°    | 0°                   | 8°    |