

#### DESCRIPTION

The BAS20H is available in SOD-323 Package.

# FEATURES

• For the application of requiring Unique Site and Control Change Requirements

#### ORDERING INFORMATION

### **PIN DESCRIPTION**

| Package Type                             | Part Number   |  |  |  |
|--|---------------|--|--|--|
| SOD-323                                  | BAS20H        |  |  |  |
| Note                                     | 3,000pcs/Reel |  |  |  |
| AiT provides all RoHS Compliant Products |               |  |  |  |





## ABSOLUTE MAXIMUM RATINGS

| $T_A = 25^{\circ}C$                                       |                       |               |
|---|-----------------------|---------------|
| V <sub>R</sub> , Continuous Reverse Voltage               | 200V                  |               |
| I <sub>F</sub> , Peak Forward Current                     |                       | 200mA         |
| I <sub>FM</sub> , Peak Forward Surge Current              |                       | 625mA         |
| P. Dower Dissinction (ED 5) Poord                         | T <sub>A</sub> = 25°C | 200mW         |
| P <sub>D</sub> , Power Dissipation (FR-5) Board           | Derate above 25°C     | 1.57mW/°C     |
| R <sub>0JA</sub> , Thermal Resistance Junction to Ambient |                       | 635°C/W       |
| T <sub>J</sub> , Junction Temperature                     |                       | 150°C         |
| T <sub>STG</sub> , Storage Temperature Range              |                       | -55°C ~+150°C |

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected. \*FR–5 Minimum Pad

### ELECTRICAL CHARACTERISTICS

#### $T_A = 25^{\circ}C$ , unless otherwise noted

| Parameter                 | Symbol            | Conditions                                    | Min. | Тур. | Max. | Unit |
|---------------------------|-------------------|---|------|------|------|------|
| Reverse Breakdown Voltage | V <sub>(BR)</sub> | I <sub>BR</sub> = 100μA                       | 200  | -    | -    | V    |
| Reverse Current           | IR                | V <sub>R</sub> = 200V                         | -    | -    | 1    | μA   |
|                           |                   | V <sub>R</sub> = 200V, T <sub>J</sub> = 150°C | -    | -    | 100  |      |
| Forward voltage           | VF                | I <sub>F</sub> =100mA                         | -    | -    | 1    | V    |
|                           |                   | I⊧ =200mA                                     | -    | -    | 1.25 |      |
| Diode Capacitance         | CD                | V <sub>R</sub> = 0, f = 1MHz                  | -    | -    | 5    | pF   |
| Reverse Recovery Time     | trr               | IF=I <sub>R</sub> =30mA,                      | -    | -    | 50   | ns   |
|                           |                   | RL=100Ω                                       |      |      |      |      |



# TYPICAL CHARACTERISTICS

Fig.1 IF vs VF 1 IF, Forward Current(A) 0.1 150°C 85°C 0.01 -55°( 0.001 0.0001 0 0.2 0.6 0.8 1.2 0.4 1 VF,Forward Voltage(V)

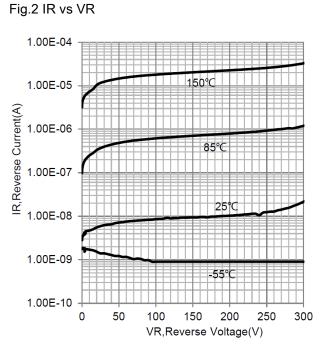
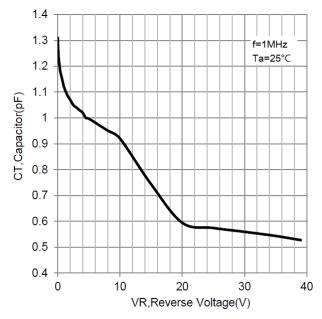


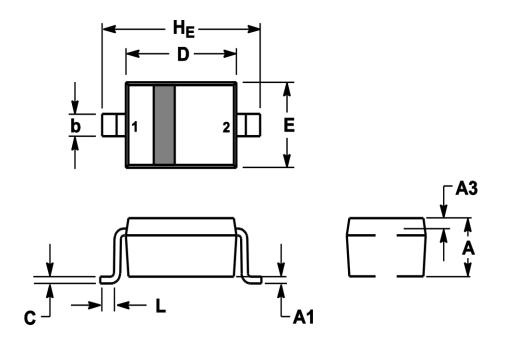
Fig.3 CT vs VR





# PACKAGE INFORMATION

Dimension in SOD-323 Package (Unit: mm)



| UNIT | SOD-323     |       |  |  |
|------|-------------|-------|--|--|
|      | MIN         | MAX   |  |  |
| А    | 0.800       | 1.000 |  |  |
| A1   | 0.000       | 0.100 |  |  |
| A3   | 0.150 REF   |       |  |  |
| b    | 0.250       | 0.400 |  |  |
| С    | 0.089 0.177 |       |  |  |
| D    | 1.600 1.800 |       |  |  |
| E    | 1.150 1.350 |       |  |  |
| L    | 0.080       | -     |  |  |
| HE   | 2.300       | 2.700 |  |  |



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