



# BAS70xW

**DIODE**

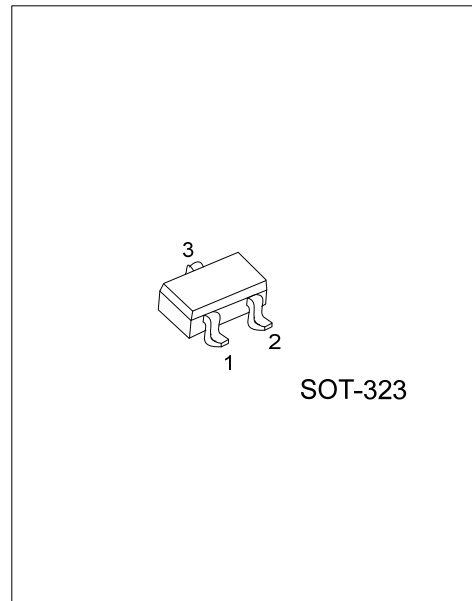
## SCHOTTKY BARRIER DIODES

### DESCRIPTION

Planar Schottky barrier diodes encapsulated in the SOT-323 small plastic SMD package. Single diode and dual diodes with different pin configuration are available.

### FEATURES

- \* Low Turn-on voltage
- \* Fast switching
- \* Ultra-small surface mount package
- \* Also available in lead free version



### ORDERING INFORMATION

| Ordering Number |                | Package | Pin Assignment |    |      | Packing   |
|-----------------|----------------|---------|----------------|----|------|-----------|
| Lead Free       | Halogen Free   |         | 1              | 2  | 3    |           |
| BAS70WL-AL3-R   | BAS70WG-AL3-R  | SOT-323 | A              | NC | K    | Tape Reel |
| BAS70AWL-AL3-R  | BAS70AWG-AL3-R | SOT-323 | K2             | K1 | A1A2 | Tape Reel |
| BAS70CWL-AL3-R  | BAS70CWG-AL3-R | SOT-323 | A2             | A1 | K1K2 | Tape Reel |
| BAS70SWL-AL3-R  | BAS70SWG-AL3-R | SOT-323 | A2             | K1 | K1A2 | Tape Reel |

Note: Pin Assignment: A: Anode K: Cathode NC: No Connection

|  |   |
|--|---|
| <p>BAS70xWG-AL3-R</p> <p>(1) Packing Type<br/>(2) Package Type<br/>(3) Green Package<br/>(4) Diode Configuration</p> | <p>(1) R: Tape Reel<br/>(2) AL3: SOT-323<br/>(3) G: Halogen Free and Lead Free, L: Lead Free<br/>(4) x: refer to DIODE CONFIGURATION AND SYMBOL</p> |
|--|---|

### DIODE CONFIGURATION AND SYMBOL

| BAS70W | BAS70AW | BAS70CW | BAS70SW |
|--------|---------|---------|---------|
|        |         |         |         |

### MARKING

| BAS70W                                  | BAS70AW                                 | BAS70CW                                 | BAS70SW                                 |
|---|---|---|---|
| <p>G: Halogen Free<br/>L: Lead Free</p> | <p>G: Halogen Free<br/>L: Lead Free</p> | <p>G: Halogen Free<br/>L: Lead Free</p> | <p>G: Halogen Free<br/>L: Lead Free</p> |

■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

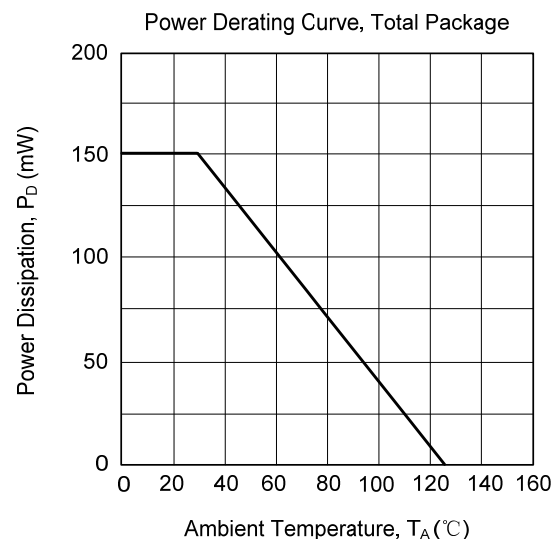
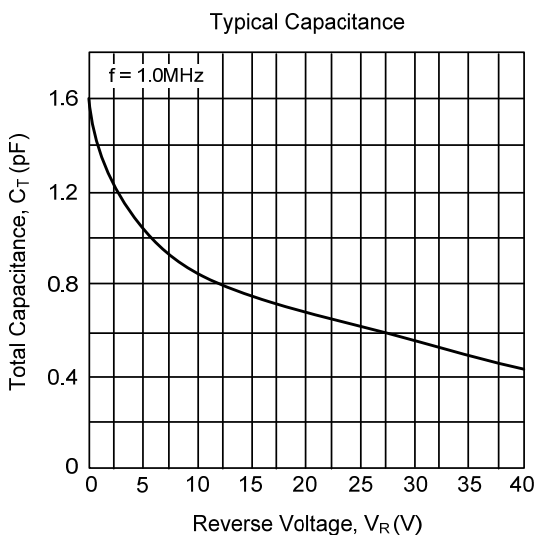
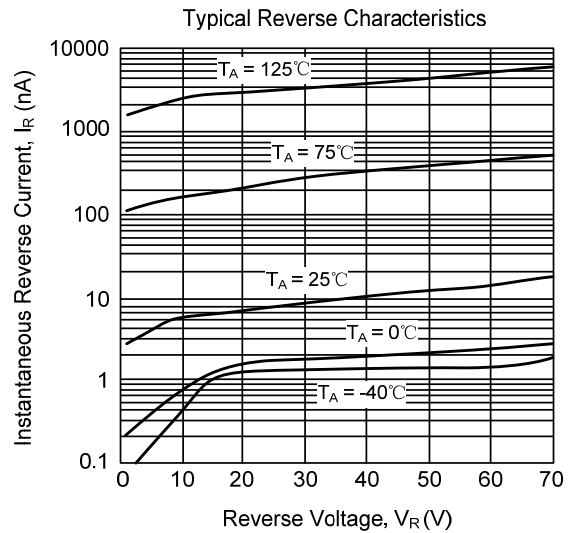
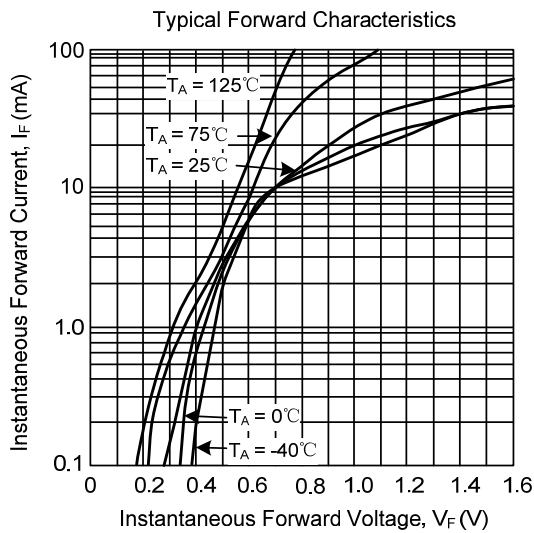
| PARAMETER                  | SYMBOL    | RATINGS    | UNITS              |
|----------------------------|-----------|------------|--------------------|
| DC Voltage                 | $V_R$     | 70         | V                  |
| Forward Continuous Current | $I_F$     | 70         | mA                 |
| Power Dissipation          | $P_D$     | 150        | mW                 |
| Junction Temperature       | $T_J$     | -55 ~ +150 | $^{\circ}\text{C}$ |
| Storage Temperature        | $T_{STG}$ | -55 ~ +150 | $^{\circ}\text{C}$ |

Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

| PARAMETER                       | SYMBOL   | TEST CONDITIONS   | MIN | TYP | MAX  | UNIT |
|---------------------------------|----------|---|-----|-----|------|------|
| Reverse Breakdown Voltage       | $BV_R$   | $I_R=10\mu\text{A}$                                       | 70  |     |      | V    |
| Reverse Voltage Leakage Current | $I_R$    | $V_R=50\text{V}$  |     |     | 200  | nA   |
| Forward Voltage                 | $V_F$    | $I_F=1\text{mA}$  |     |     | 410  | mV   |
|                                 |          | $I_F=15\text{mA}$   |     |     | 1000 | mV   |
| Diode Capacitance               | $C_D$    | $V_R=0\text{V}$ , $f=1\text{MHz}$                         |     |     | 2    | pF   |
| Reverse Recovery Time           | $t_{RR}$ | $I_F=I_R=10\text{mA}$ , $I_{RR}=0.1I_R$ , $R_L=100\Omega$ |     |     | 5    | nS   |

■ TYPICAL CHARACTERISTICS



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