



BAS70xW

DIODE

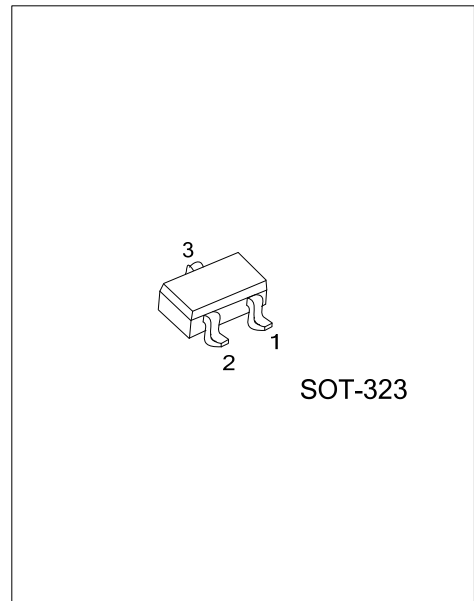
SCHOTTKY BARRIER DIODES

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 | x | A | K | Tape Reel |
| BAS70AWL-AL3-R | BAS70AWG-AL3-R | SOT-323 | K1 | K2 | A2A1 | Tape Reel |
| BAS70CWL-AL3-R | BAS70CWG-AL3-R | SOT-323 | A1 | A2 | K2K1 | Tape Reel |
| BAS70SWL-AL3-R | BAS70SWG-AL3-R | SOT-323 | K1 | A2 | K2A1 | Tape Reel |

Note: Pin Assignment: A: Anode K: Cathode x: NC

| | |
|-----------------------|--|
| <p>BAS70xWL-AE3-R</p> | <p>(1) R: Tape Reel (2) AL3: SOT-323 (3) L: Lead Free, G: Halogen Free (4) x: refer to Pin Assignment</p> |
|-----------------------|--|

■ DIODE CONFIGURATION AND SYMBOL

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

■ MARKING

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

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

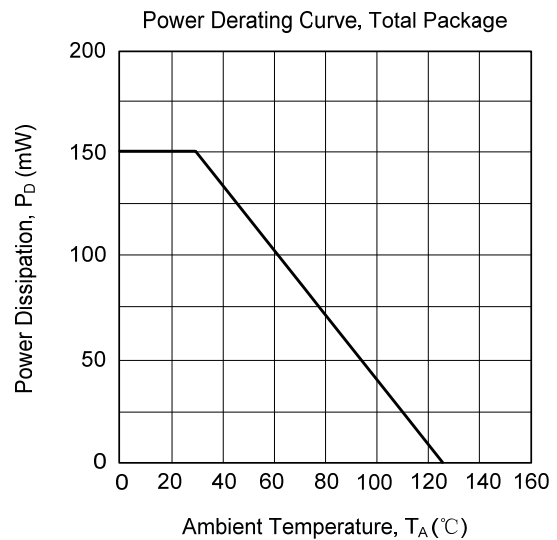
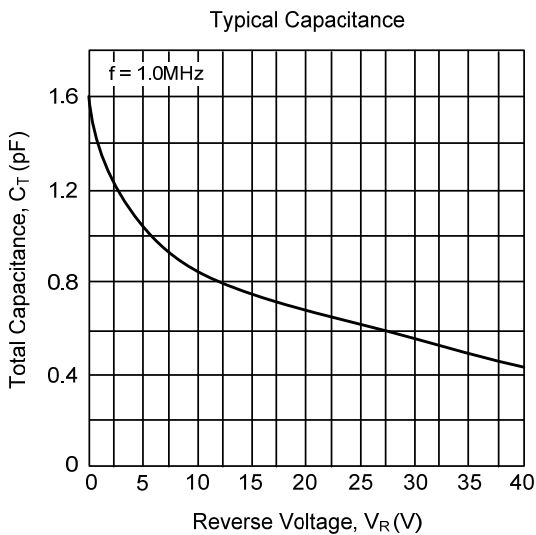
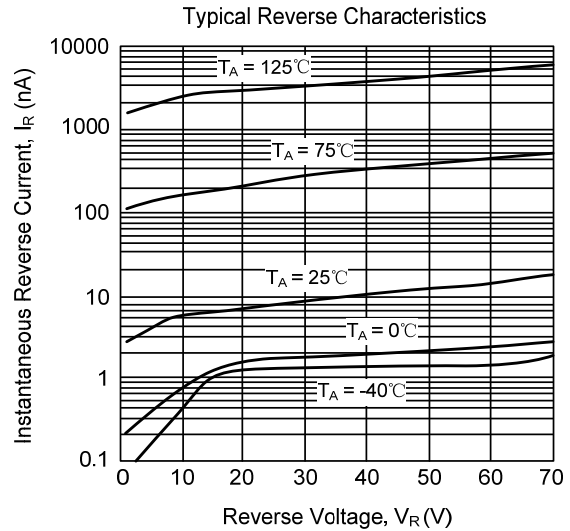
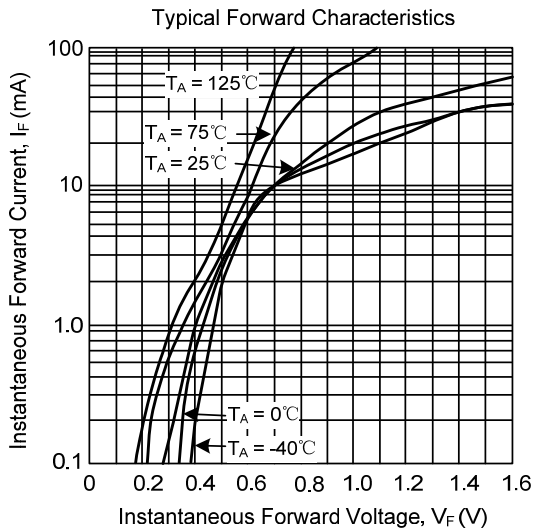
| PARAMETER | SYMBOL | RATINGS | UNITS |
|----------------------------|-----------|------------|--------------------|
| DC Voltage | V_R | 70 | V |
| Forward Continuous Current | I_F | 70 | mA |
| Power Dissipation | P_D | 150 | mW |
| Junction Temperature | T_J | -55 ~ +150 | $^{\circ}\text{C}$ |
|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