

SOD-323 Plastic-Encapsulate Diodes

BAS19WS/BAS20WS/BAS21WS FAST SWITCHING DIODE

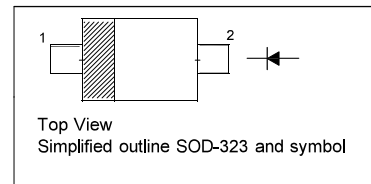
FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications

MARKING: BAS19WS: A8
BAS20WS: T2
BAS21WS: T3

PINNING

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



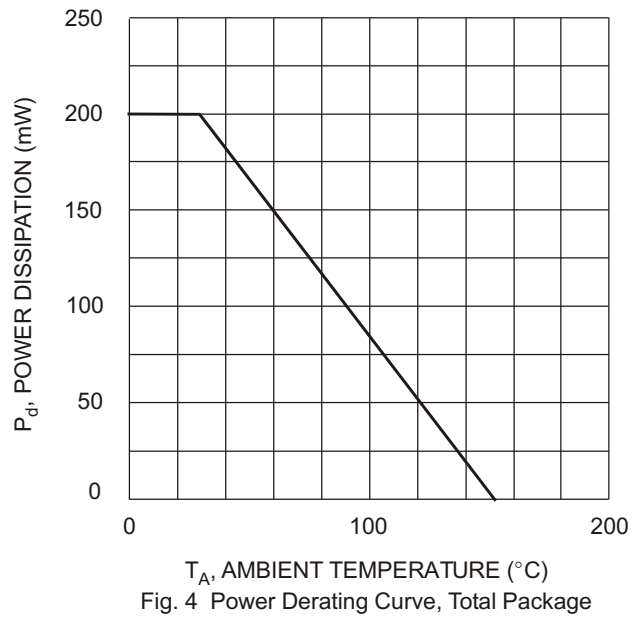
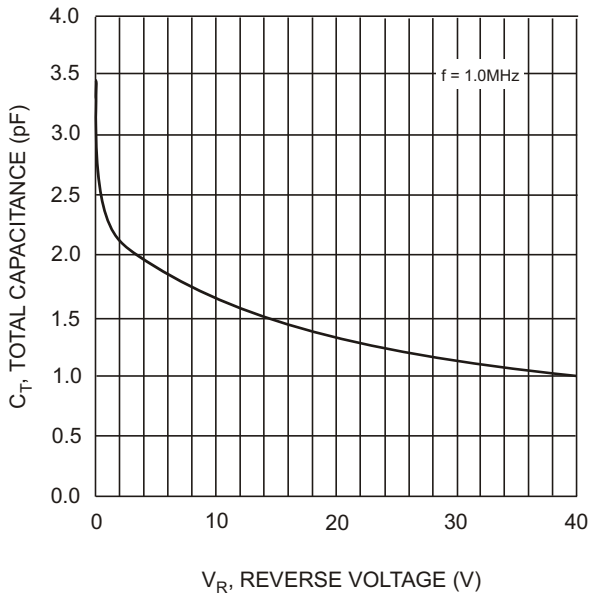
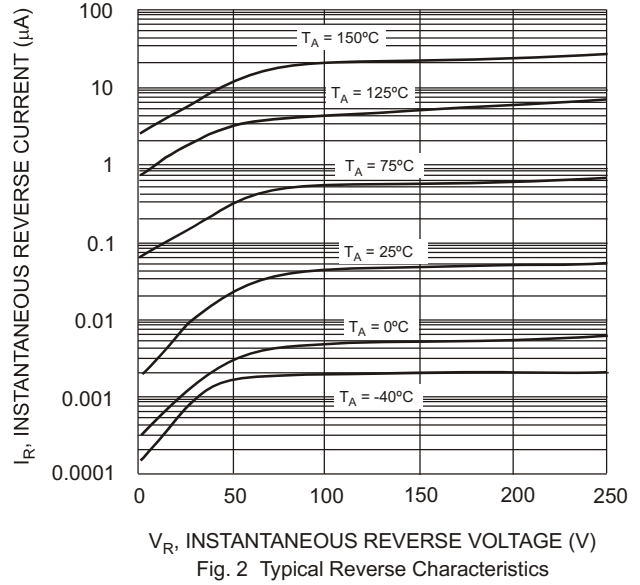
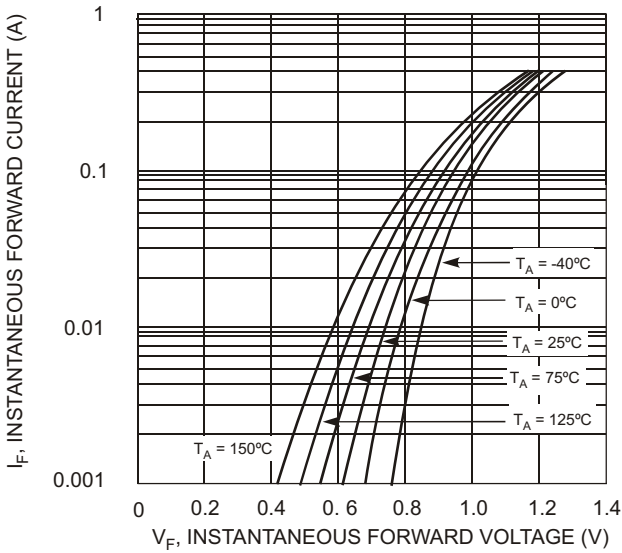
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

| Parameter | Symbol | BAV19WS | BAV20WS | BAV21WS | Unit |
|---|-----------------|------------|---------|---------|------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 120 | 200 | 250 | V |
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | | | | |
| Working Peak Reverse Voltage | V_{RWM} | 100 | 150 | 200 | V |
| DC Blocking Voltage | V_R | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 71 | 106 | 141 | V |
| Forward Continuous Current | I_{FM} | 400 | | | mA |
| Average Rectified Output Current | I_O | 200 | | | mA |
| Peak Forward Surge Current @t=1.0ms @ t=1.0s | I_{FSM} | 2.5 0.5 | | | A |
| Repetitive Peak Forward Current | I_{FRM} | 625 | | | mA |
| Power Dissipation | P_d | 200 | | | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 625 | | | °C/W |
| Storage Temperature | T_{STG} | -55~+150 | | | °C |

Electrical Ratings @Ta=25°C

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|--|-----|-----|------|---------|--|
| Forward voltage | V_{F1} | | | 1.0 | V | $I_F=0.1A$ |
| | V_{F2} | | | 1.25 | | $I_F=0.2A$ |
| Reverse current | BAS19WS BAS20WS BAS21WS I_R | | | 0.1 | μA | $V_R=100V$ |
| | | | | 0.1 | | $V_R=150V$ |
| | | | | 0.1 | | $V_R=200V$ |
| Capacitance between terminals | C_T | | | 5 | pF | $V_R=0V, f=1MHz$ |
| Reverse recovery time | t_{rr} | | | 50 | ns | $I_F=I_R=30mA$ $I_{rr}=0.1I_R, R_L=100\Omega$ |

Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

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