



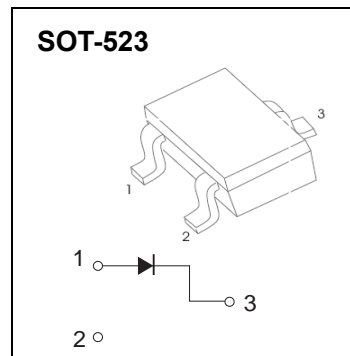
SOT-523 Plastic-Encapsulate Diodes

BAS21T

SWITCHING DIODE

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**



MARKING :T3

Maximum Ratings @Ta=25°C

| Parameter | Symbol | Limit | Unit | |
|---|-----------------|-------------|------|---|
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | 250 | V | |
| Working Peak Reverse Voltage | V_{RWM} | | | |
| DC Blocking Voltage | V_R | | | |
| Forward Continuous Current | I_{FM} | 400 | mA | |
| Average Rectified Output Current | I_O | 200 | mA | |
| Non-Repetitive Peak Forward Surge Current | I_{FSM} | @ t = 1.0µs | 2.5 | A |
| | | @ t = 1.0s | 0.5 | |
| Power Dissipation | P_D | 150 | mW | |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 833 | °C/W | |
| Operating Junction Temperature | T_J | 150 | °C | |
| Storage Temperature | T_{STG} | -55~+150 | °C | |

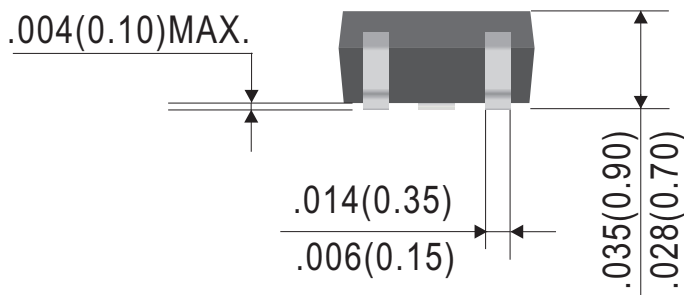
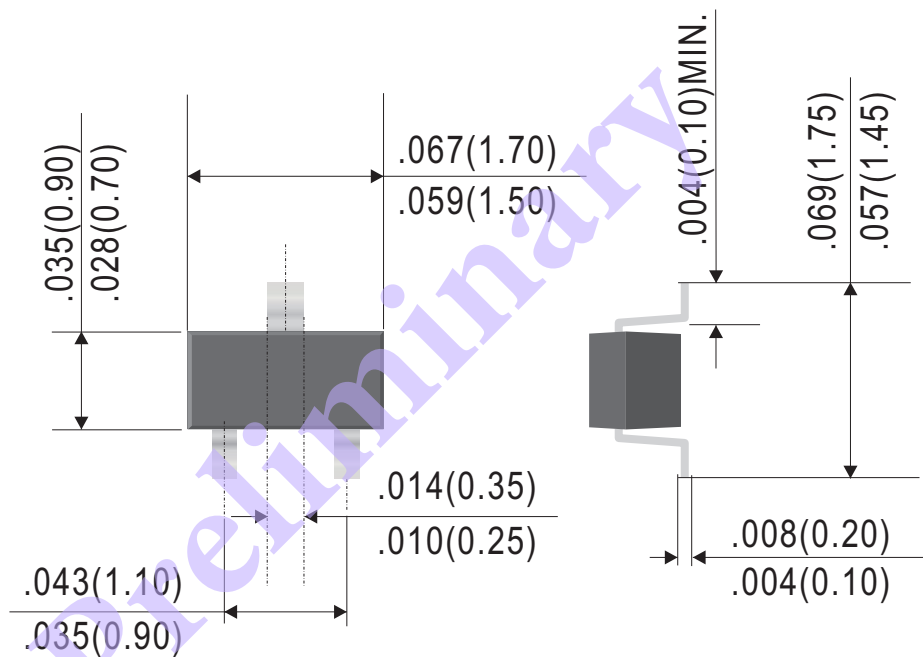
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Max | Unit |
|---------------------------------|------------|---|-----|-----------|------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R = 100\mu A$ | 250 | | V |
| Reverse voltage leakage current | I_R | $V_R = 200V$ | | 100 | nA |
| Forward voltage | V_F | $I_F = 100mA$ $I_F = 200mA$ | | 1 1.25 | V |
| Total capacitance | C_T | $V_R = 0V, f = 1MHz$ | | 5 | pF |
| Reverse recovery time | t_{rr} | $I_F = I_R = 30mA, I_{rr} = 0.1 \times I_R,$ $R_L = 100\Omega$ | | 50 | ns |



Outline Drawing

SOT-523



Dimensions in inches and (millimeters)