Elektronische Bauelemente

# BAS21T

**0.4A , 250V**

**Plastic-Encapsulated Diode**

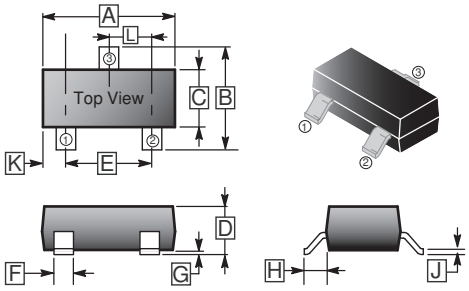
RoHS Compliant Product

A suffix of “-C” specifies halogen & lead-free

## FEATURES

- Fast switching speed
- For General Purpose Switching Applications
- High Conductance

**SOT-523**



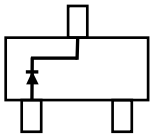

| REF. | Millimeter | | REF. | Millimeter | |
|---|---|---|---|---|---|
| | Min. | Max. | | Min. | Max. |
| A | 1.5 | 1.7 | G | - | 0.1 |
| B | 1.45 | 1.75 | H | 0.55 REF. | |
| C | 0.75 | 0.85 | J | 0.1 | 0.2 |
| D | 0.7 | 0.9 | K | - | |
| E | 0.9 | 1.1 | L | 0.5 TYP. | |
| F | 0.15 | 0.25 | M | 0.25 | 0.325 |

## MARKING

**T3**

## PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---|---|---|
| SOT-523 | 3K | 7 inch |



## ABSOLUTE MAXIMUM RATINGS ($T_A$=25℃ unless otherwise specified)

| Parameter | | Symbol | Value | Unit |
|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | | $V_{RRM}$ | 250 | V |
| Working Peak Reverse Voltage | | $V_{RWM}$ | | |
| Reverse voltage | | $V_R$ | | |
| Peak forward Continuous current | | $I_{FM}$ | 400 | mA |
| Maximum Average Forward Rectified Current | | $I_{F(AV)}$ | 200 | mA |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | t=1.0μs | $I_{FSM}$ | 2.5 | A |
| | t=1.0s | | 0.5 | |
| Power dissipation | | $P_D$ | 150 | mW |
| Typical Thermal Resistance Junction to Ambient | | $R_{\theta JA}$ | 833 | ℃ / W |
| Operating Junction and storage temperature range | | $T_J$,$T_{STG}$ | 150, -65~150 | ℃ |

Elektronische Bauelemente

# BAS21T

**0.4A , 250V**

**Plastic-Encapsulated Diode**

## ELECTRICAL CHARACTERISTICS ($T_A$=25℃ unless otherwise specified)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|---|---|---|---|---|---|---|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | 250 | - | - | V | $I_R$=100μA |
| Forward Voltage | $V_{F1}$ | - | - | 1 | V | $I_F$=100mA |
| | $V_{F2}$ | - | - | 1.25 | | $I_F$=200mA |
| Reverse Voltage Leakage Current | $I_R$ | - | - | 0.1 | μA | $V_R$=200V |
| Total Capacitance | $C_T$ | - | - | 5 | pF | $V_R$=0 , f=1MHz |
| Reverse Recovery Time | $T_{RR}$ | - | - | 50 | nS | $I_F$=$I_R$=30mA, $I_{RR}$=0.1 x $I_R$, $R_L$=100Ω |

## RATINGS AND CHARACTERISTIC CURVES

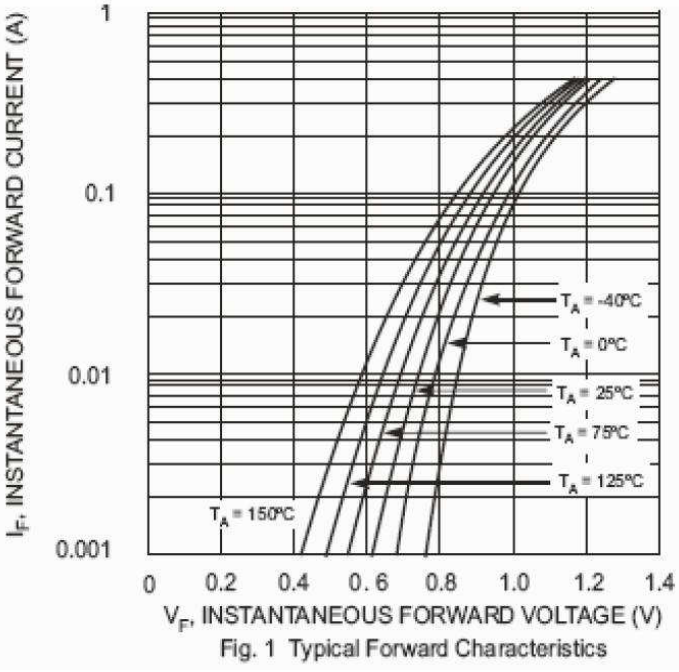



Fig. 1 Typical Forward Characteristics

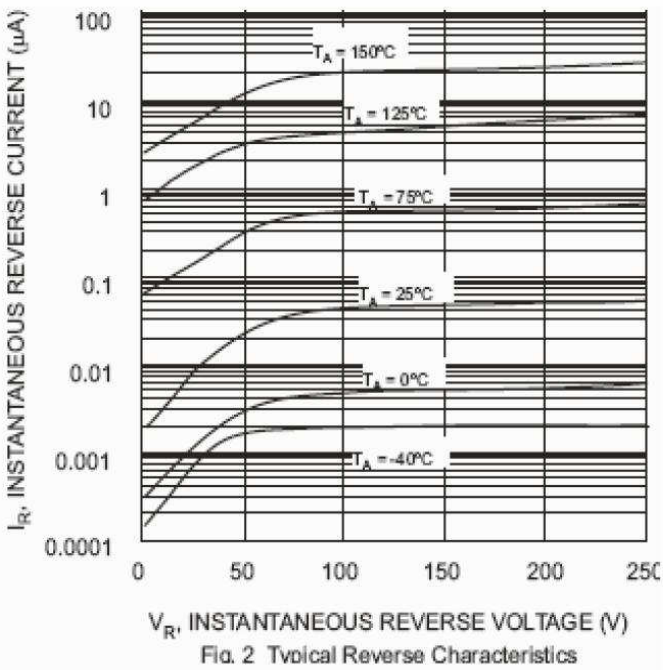



Fig. 2 Typical Reverse Characteristics