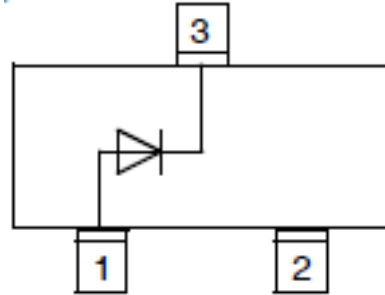


### ■ FEATURES

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Current Leakage
- Marking:JS



**SOT-23**



### ■ MAXIMUM RATINGS (T<sub>a</sub>=25°C Unless otherwise specified)

| Item  | Symbol           | Unit | Value       |
|---|------------------|------|-------------|
| Reverse Voltage                                   | V <sub>R</sub>   | V    | 250         |
| Forward Continuous Current, Per Leg               | I <sub>F</sub>   | mA   | 200         |
| Non-Repetitive Peak Forward Surge Current @ t=1s, | I <sub>FSM</sub> | A    | 0.5         |
| Power Dissipation                                 | P <sub>D</sub>   | mW   | 250         |
| Operation Junction Temperature                    | T <sub>J</sub>   | °C   | -55 to +150 |
| Storage Temperature                               | T <sub>STG</sub> | °C   | -55 to +150 |

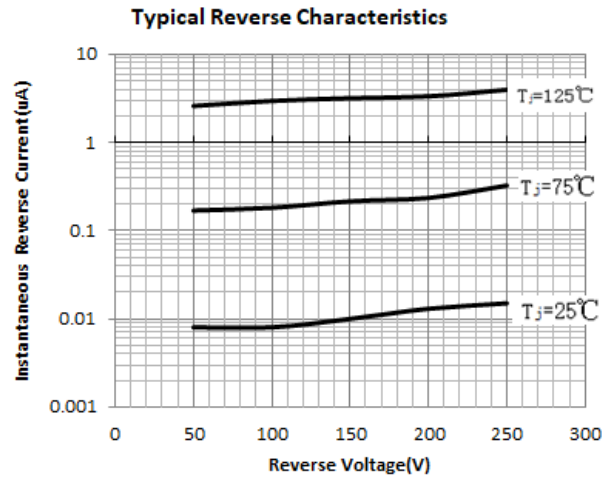
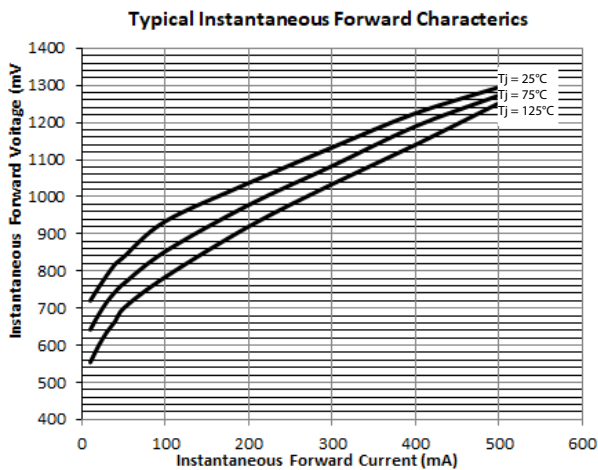
### ■ ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

| Item                                  | Symbol          | Unit | Conditions   | Value |
|---------------------------------------|-----------------|------|--|-------|
| Reverse Voltage                       | V <sub>R</sub>  | V    | I <sub>R</sub> =100uA  | 250   |
| Maximum Instantaneous Forward Voltage | V <sub>F</sub>  | V    | I <sub>FM</sub> =100mA, T <sub>J</sub> =25°C   | 1.0   |
|                                       |                 |      | I <sub>FM</sub> =200mA, T <sub>J</sub> =25°C   | 1.25  |
| Maximum DC Reverse Current            | I <sub>R</sub>  | nA   | V <sub>R</sub> =200V   | 100   |
| Typical Junction Capacitance          | C <sub>J</sub>  | pF   | f=1.0MHz, V <sub>R</sub> =0V   | 5     |
| Reverse Recovery Time                 | T <sub>rr</sub> | ns   | I <sub>F</sub> =30mA, I <sub>R</sub> =30mA, R <sub>L</sub> =100Ω, I <sub>rr</sub> =3mA | 50    |

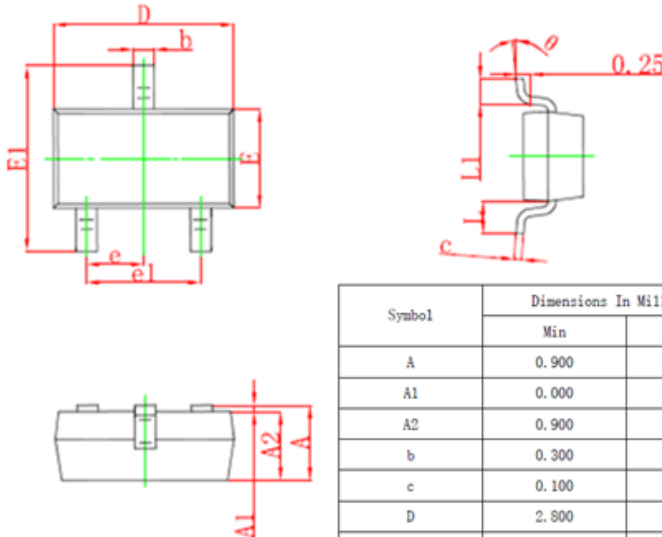
### ■ PACKAGING INFORMATION

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g)    | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| BAS21         | F2           | Approximate 0.008 | 3000                 | 30000                   | 120000                     | 7" reel       |

## CHARACTERISTICS (TYPICAL)



## SOT-23 PACKAGE OUTLINE DIMENSIONS



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 0.900                     | 1.150 | 0.035                | 0.045 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.900                     | 1.050 | 0.035                | 0.041 |
| b      | 0.300                     | 0.500 | 0.012                | 0.020 |
| c      | 0.100                     | 0.200 | 0.004                | 0.008 |
| D      | 2.800                     | 3.000 | 0.110                | 0.118 |
| E      | 1.200                     | 1.400 | 0.047                | 0.055 |
| E1     | 2.250                     | 2.550 | 0.089                | 0.100 |
| e      | 0.950TYP                  |       | 0.037TYP             |       |
| e1     | 1.800                     | 2.000 | 0.071                | 0.079 |
| L      | 0.550REF                  |       | 0.022REF             |       |
| L1     | 0.300                     | 0.500 | 0.012                | 0.020 |
| theta  | 0°                        | 8°    | 0°                   | 8°    |

## ■ SOT-23 SUGGESTED PAD LAYOUT

