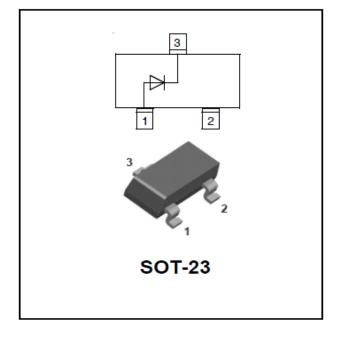
# Switching Diode



#### Features

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

### ■Maximum Rating, (Ta=25°C Unless otherwise specified)

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

## ■Ordering Information (Example)

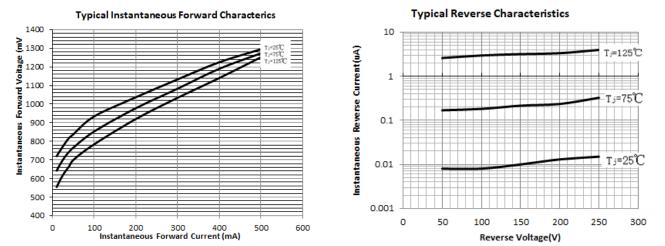
| PREFERED P/N | PACKING<br>CODE | UNIT WEIGHT(g)    | MINIMUM<br>PACKAGE(pcs) | INNER BOX<br>QUANTITY(pcs) | OUTER CARTON<br>QUANTITY(pcs) | DELIVERY MODE |
|--------------|-----------------|-------------------|-------------------------|----------------------------|-------------------------------|---------------|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

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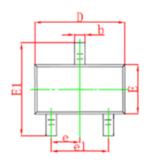
## ■Electrical Characteristics (Ta=25°C Unless otherwise specified, Per Leg)

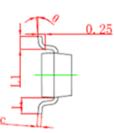
| Item                                  | Symbol         | Unit | Conditions  | Value |
|---------------------------------------|----------------|------|---|-------|
| Reverse Voltage                       | V <sub>R</sub> | V    | IR=100uA  | 250   |
| Maximum Instantaneous Forward Voltage | V <sub>F</sub> | V    | I <sub>FM</sub> =100mA, T <sub>J</sub> =25℃   | 1.0   |
|                                       |                |      | I <sub>FM</sub> =100mA, T <sub>J</sub> =25℃   | 1.25  |
| Maximum DC Reverse Current            | I <sub>R</sub> | nA   | V <sub>R</sub> =200V  | 100   |
| Typical Junction Capacitance          | CJ             | pF   | f=1.0MHz, V <sub>R</sub> =0V  | 5     |
| Reverse Recovery Time                 | Trr            | ns   | $I_{\text{F}}\text{=}30\text{mA},~I_{\text{R}}\text{=}30\text{mA},~R_{\text{L}}\text{=}100~\Omega,$ $I_{\text{rr}}\text{=}3\text{mA}$ | 50    |

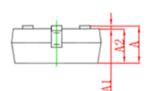
## Typical Characteristics (Per Leg)



# ■SOT-23 Package Outline Dimensions

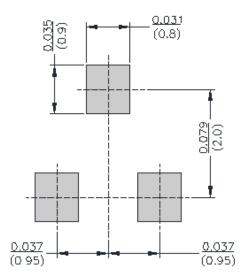






| Symbol - | Dimensions In | n Millimeters | Dimensions In Inches |       |  |
|----------|---------------|---------------|----------------------|-------|--|
|          | Min           | Max           | Min                  | Max   |  |
| A        | 0.900         | 1.150         | 0.035                | 0.045 |  |
| Al       | 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 |  |
| Е        | 1.200         | 1. 400        | 0.047                | 0.055 |  |
| E1       | 2.250         | 2.550         | 0.089                | 0.100 |  |
| e        | 0.95          | OTYP          | 0. 037TYP            |       |  |
| el       | 1.800         | 2.000         | 0.071                | 0.079 |  |
| L        | 0. 550REF     |               | 0. 022REF            |       |  |
| L1       | 0.300         | 0.500         | 0.012                | 0.020 |  |
| θ        | 0°            | 8°            | 0°                   | 8*    |  |

# ■SOT-23Suggested Pad Layout



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#### Disclaimer

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