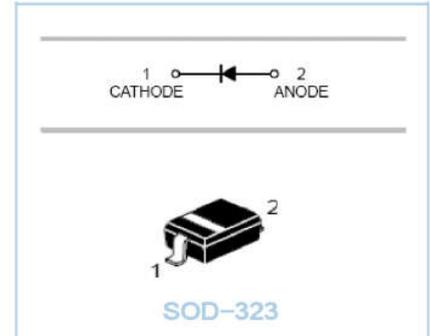


## Silicon Epitaxial Planar Diode

### FEATURES

- Fast Switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



### APPLICATIONS

- Surface mount fast switching diode

### ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| BAS321   | A7      | SOD-323      |

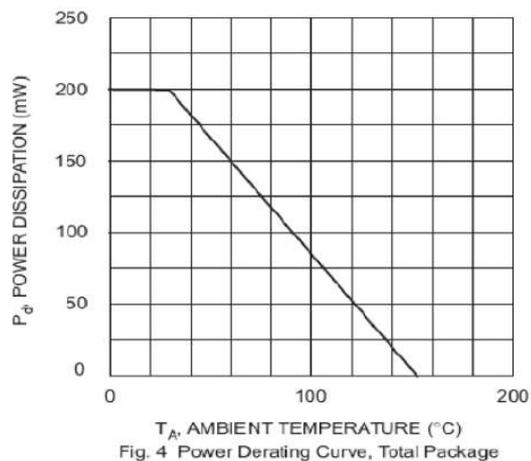
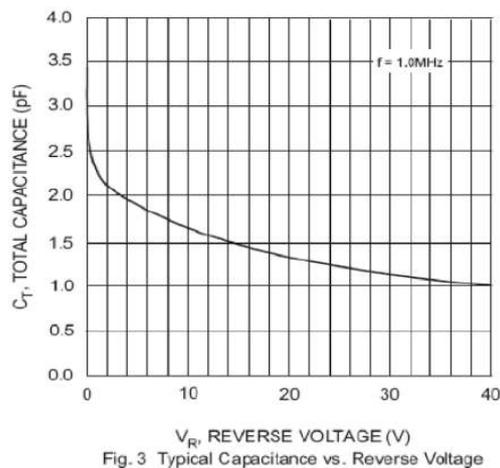
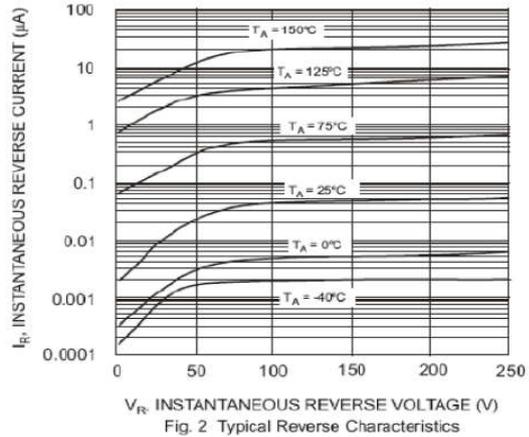
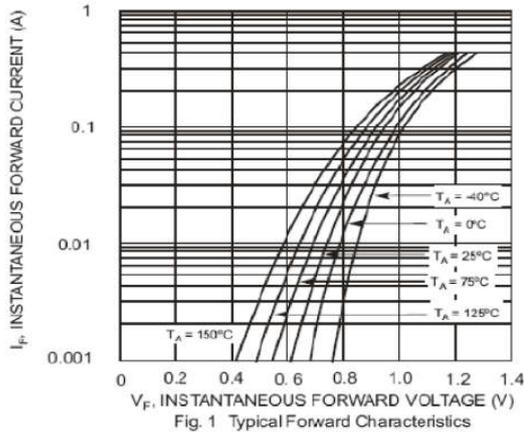
### MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Characteristic                             | Symbol          | TECHNICAL DATA | Unit          |
|--|-----------------|----------------|---------------|
| Repetitive Peak Reverse Voltage            | $V_{RRM}$       | 250            | V             |
| Working Peak Reverse Voltage               | $V_{RWM}$       | 200            | V             |
| DC Reverse Voltage                         | $V_R$           |                |               |
| RMS Reverse Voltage                        | $V_{R(RMS)}$    | 141            | V             |
| Forward Continuous Current                 | $I_{FM}$        | 400            | mA            |
| Average Rectified Output Current           | $I_o$           | 200            | mA            |
| Non-Repetitive Peak Forward Surge Current  | $I_{FSM}$       | 2.5            | A             |
| @t=1.0 $\mu$ s                             |                 | 0.5            |               |
| @t=1.0 s                                   |                 |                |               |
| Repetitive Peak Forward Surge Current      | $I_{FRM}$       | 625            | mA            |
| Power Dissipation                          | $P_d$           | 200            | mW            |
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | 625            | $^{\circ}C/W$ |
| Operating and Storage Temperature Range    | $T_j, T_{STG}$  | -65 to+150     | $^{\circ}C$   |

## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Characteristic                | Symbol   | Min | Max         | Unit | Test Condition  |
|-------------------------------|----------|-----|-------------|------|---|
| Forward Voltage               | $V_{FM}$ | -   | 1.0<br>1.25 | V    | $I_F=100mA$<br>$I_F=200mA$                                |
| Reverse Current               | $I_R$    | -   | 0.1         | mA   | $V_R=200V$  |
| Capacitance between terminals | $C_T$    | -   | 5           | pF   | $V_R=0, f=1.0MHz$   |
| Reverse Recovery Time         | $t_{rr}$ | -   | 50          | ns   | $I_F=I_R=30mA,$<br>$I_{rr}=0.1 \times I_R, R_L=100\Omega$ |

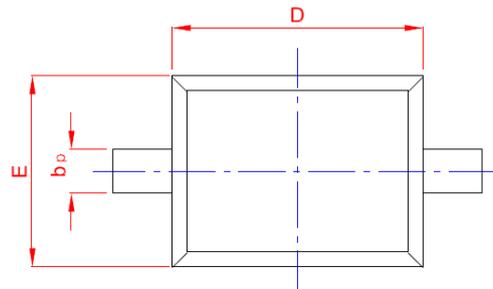
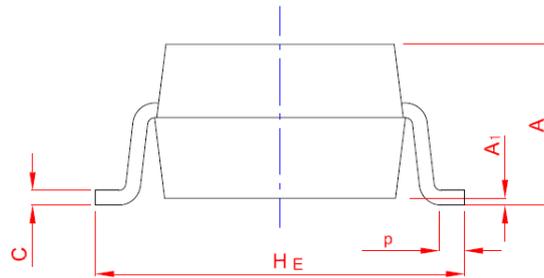
## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



## PACKAGE OUTLINE

Plastic surface mounted package;

2 leads



| UNIT | A    | b <sub>p</sub> | C    | D    | E    | H <sub>E</sub> | A <sub>1</sub> | L <sub>p</sub> |
|------|------|----------------|------|------|------|----------------|----------------|----------------|
| mm   | 1.20 | 0.40           | 0.15 | 1.80 | 1.35 | 2.80           | 0.10           | 0.50           |
|      | 0.90 | 0.25           | 0.10 | 1.60 | 1.15 | 2.30           | 0.01           | 0.20           |