

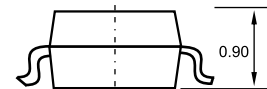
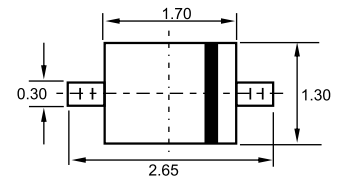
## BAS316

Silicon Epitaxial Planar Diodes

SOD-323

### Features

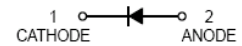
- ✧ Very small plastic SMD package.
- ✧ High switching speed:max.4ns
- ✧ Continuous reverse voltage:max.100v
- ✧ Repetitive peak reverse voltage:max.100v
- ✧ Repetitive peak forward current:max.500mA



Dimensions in inches and (millimeters)

### Applications

- ✧ Surface mount fast switching diode



### Ordering Information

| Type No. | Marking | Packing & Order Information |
|----------|---------|-----------------------------|
| BAS316   | A6      | 3000 pcs / Tape & Reel      |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Characteristic                         | Symbol         | Value       | Unit |
|----------------------------------------|----------------|-------------|------|
| DC Reverse Voltage                     | $V_R$          | 100         | V    |
| Forward Current                        | $I_F$          | 300         | mA   |
| Power Dissipation                      | $P_d$          | 200         | mW   |
| Junction and Storage Temperature Range | $T_j, T_{STG}$ | -65 to +150 | °C   |

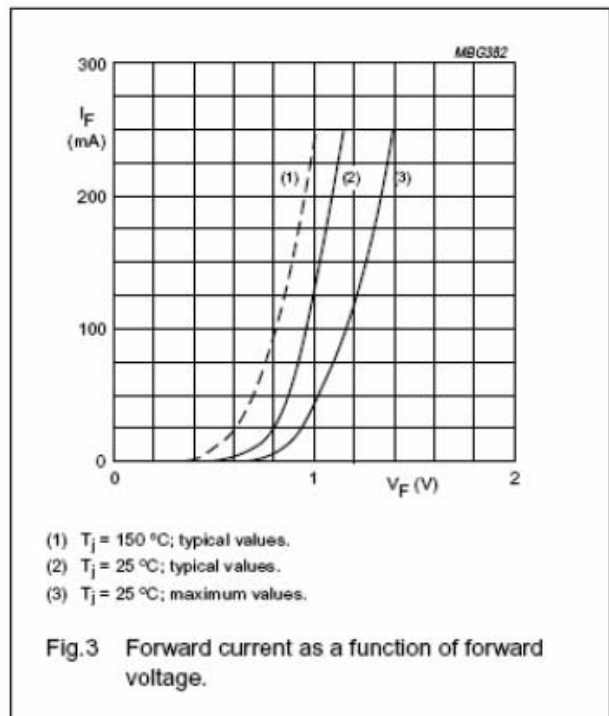
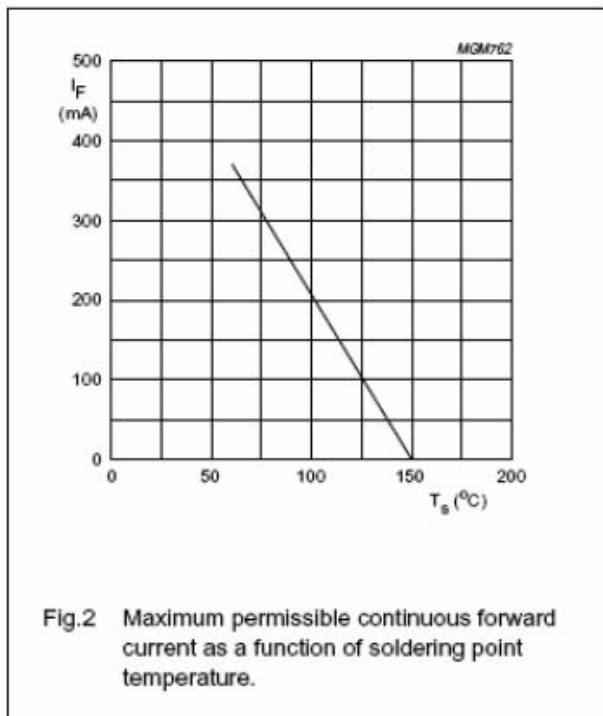
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#### ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

| Characteristic                | Symbol      | Min  | Max                           | Unit          | Test Condition                                                                     |
|-------------------------------|-------------|------|-------------------------------|---------------|------------------------------------------------------------------------------------|
| Reverse Breakdown Voltage     | $V_{(BR)R}$ | 100  | -                             | V             | $I_R=100\mu\text{A}$                                                               |
| Forward Voltage               | $V_F$       | 0.62 | 0.715<br>0.855<br>1.0<br>1.25 | V             | $I_F=1.0\text{mA}$<br>$I_F=10\text{mA}$<br>$I_F=50\text{mA}$<br>$I_F=150\text{mA}$ |
| Reverse Current               | $I_R$       | -    | 1.0<br>0.03                   | $\mu\text{A}$ | $V_R=75\text{V}$<br>$V_R=25\text{V}$                                               |
| Capacitance between terminals | $C_T$       | -    | 1.5                           | pF            | $V_R=0, f=1.0\text{MHz}$                                                           |
| Reverse Recovery Time         | $t_{rr}$    | -    | 4.0                           | ns            | $I_F=I_R=10\text{mA}, R_L=100\Omega$                                               |

#### TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



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