

# BAS40P

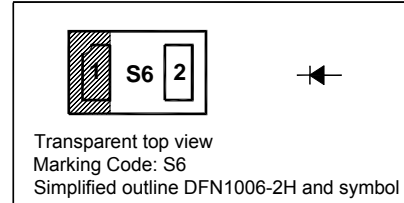
## Silicon Epitaxial Planar Schottky Barrier Diode

### Features

- Low forward voltage
- Fast switching

### PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |

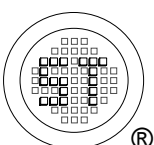


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter   | Symbol    | Value         | Unit             |
|---|-----------|---------------|------------------|
| Repetitive Peak Reverse Voltage                         | $V_{RRM}$ | 40            | V                |
| DC Blocking Voltage                                     | $V_R$     | 40            | V                |
| Forward Continuous Current                              | $I_F$     | 200           | mA               |
| Peak Forward Surge Current (at $t_p = 8.3 \text{ ms}$ ) | $I_{FSM}$ | 600           | mA               |
| Junction Temperature                                    | $T_J$     | 150           | $^\circ\text{C}$ |
| Storage Temperature Range                               | $T_{Stg}$ | - 55 to + 150 | $^\circ\text{C}$ |

### Characteristics at $T_a = 25^\circ\text{C}$

| Parameter  | Symbol         | Min.   | Max.      | Unit   |
|--|----------------|--------|-----------|--------|
| Reverse Breakdown Voltage<br>at $I_R = 10 \mu\text{A}$   | $V_{(BR)R}$    | 40     | -         | V      |
| Forward Voltage<br>at $I_F = 1 \text{ mA}$<br>at $I_F = 40 \text{ mA}$                               | $V_F$<br>$V_F$ | -<br>- | 0.38<br>1 | V<br>V |
| Reverse Current<br>at $V_R = 30 \text{ V}$   | $I_R$          | -      | 200       | nA     |
| Reverse Recovery Time<br>at $I_F = I_R = 10 \text{ mA}$ to $I_R = 1 \text{ mA}$ , $R_L = 100 \Omega$ | $t_{rr}$       | -      | 5         | ns     |
| Capacitance<br>at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$  | $C_j$          | -      | 5         | pF     |



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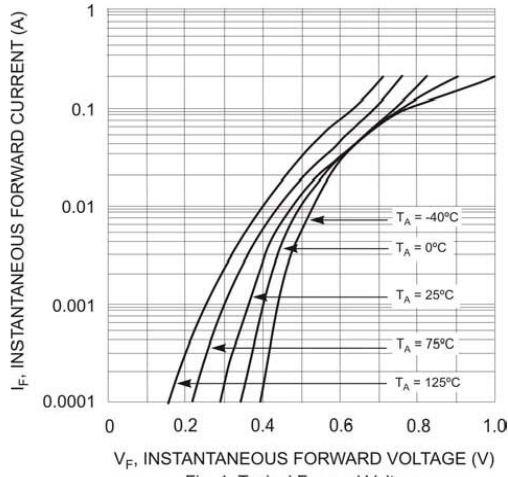


Fig. 1 Typical Forward Voltage

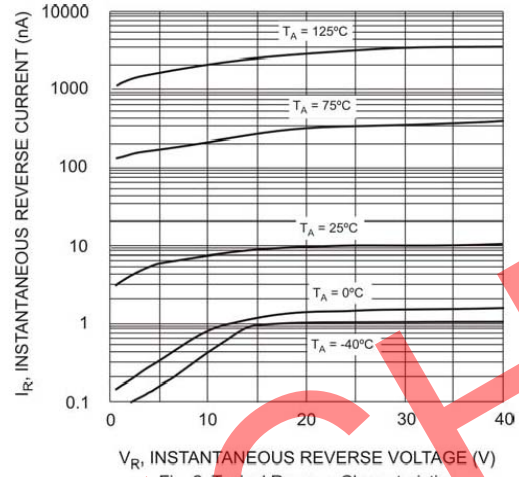


Fig. 2 Typical Reverse Characteristics

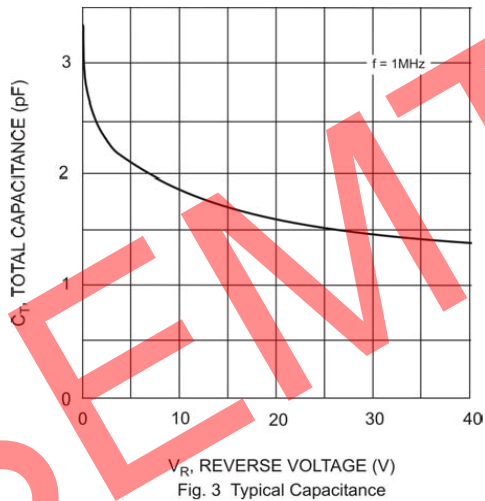
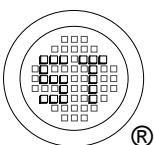


Fig. 3 Typical Capacitance

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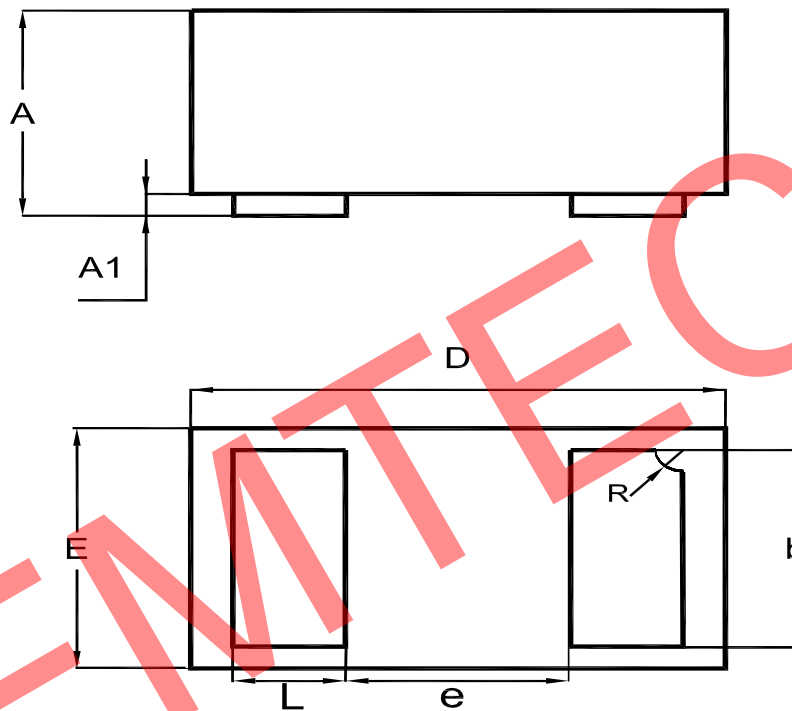


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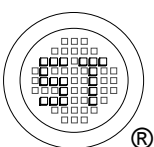
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

DFN1006-2H



| UNIT | A            | A1        | b            | D             | E             | e   | L          | R            |
|------|--------------|-----------|--------------|---------------|---------------|-----|------------|--------------|
| mm   | 0.51<br>0.46 | 0.05<br>0 | 0.55<br>0.45 | 1.075<br>0.95 | 0.675<br>0.55 | 0.4 | 0.3<br>0.2 | 0.15<br>0.05 |



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