

# BAV35WS-AH

## Silicon Epitaxial Planar Diode

High Voltage Switching Diode

### Features

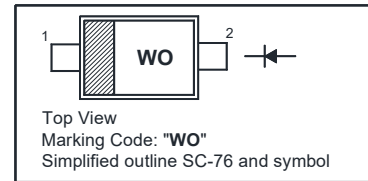
- AEC-Q101 Qualified
- Small surface mounting type
- High speed
- Suitable for high packing density
- High voltage capability
- Halogen and Antimony Free(HAF), RoHS compliant

### Application

- Ultra high speed switching

PINNING

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

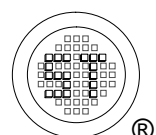


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ unless otherwise specified)

| Parameter                                                                  | Symbol          | Value         | Unit               |
|----------------------------------------------------------------------------|-----------------|---------------|--------------------|
| Peak Reverse Voltage                                                       | $V_{RM}$        | 350           | V                  |
| Reverse Voltage                                                            | $V_R$           | 300           | V                  |
| Average Rectified Forward Current                                          | $I_{F(AV)}$     | 225           | mA                 |
| Peak Forward Surge Current<br>$t_p = 1 \mu\text{s}$<br>$t_p = 1 \text{ s}$ | $I_{FSM}$       | 4<br>1        | A                  |
| Typical Thermal Resistance from Junction to Ambient                        | $R_{\theta JA}$ | 625           | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range                                    | $T_J, T_{stg}$  | - 65 to + 150 | $^\circ\text{C}$   |

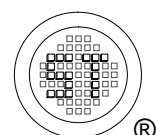
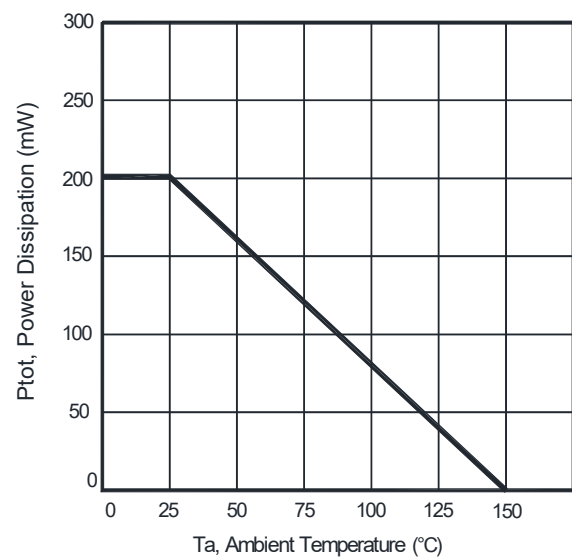
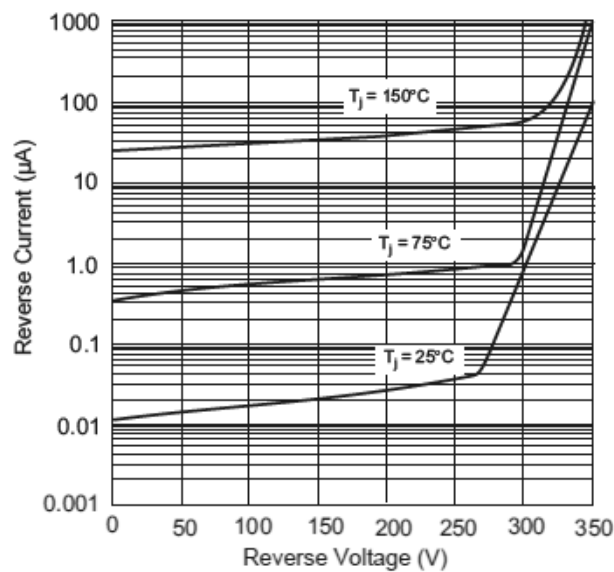
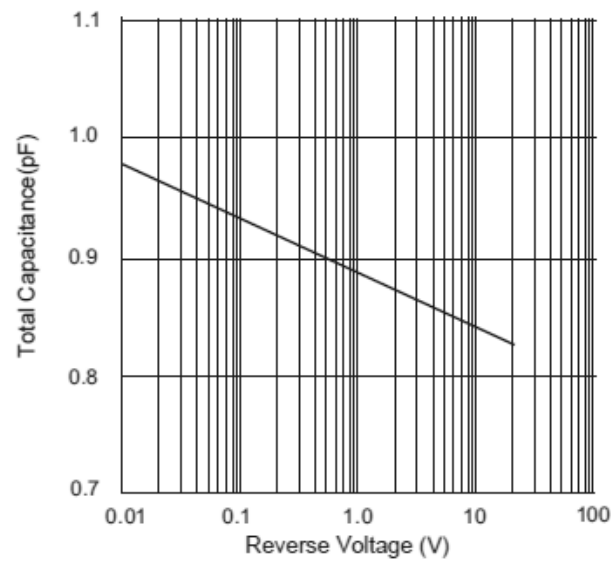
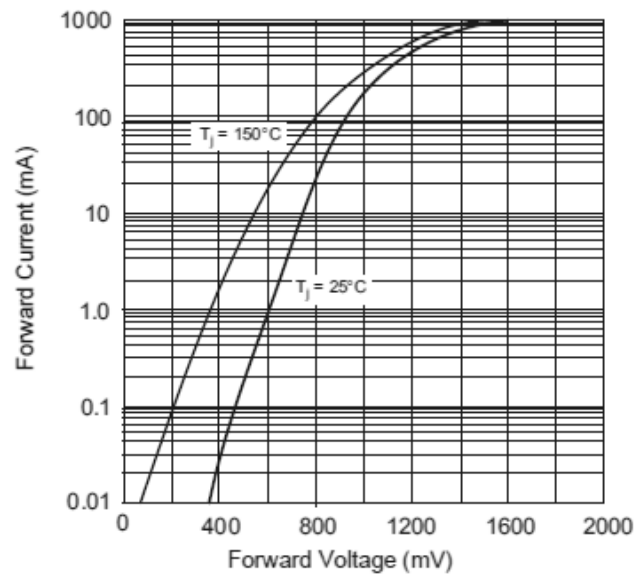
### Characteristics at $T_a = 25^\circ\text{C}$ unless otherwise specified

| Parameter                                                                                                       | Symbol      | Min.   | Max.       | Unit                |
|-----------------------------------------------------------------------------------------------------------------|-------------|--------|------------|---------------------|
| Reverse Breakdown Voltage<br>at $I_R = 150 \mu\text{A}$                                                         | $V_{(BR)R}$ | 350    | -          | V                   |
| Forward Voltage<br>at $I_F = 100 \text{ mA}$                                                                    | $V_F$       | -      | 1          | V                   |
| Reverse Current<br>at $V_R = 240 \text{ V}$<br>at $V_R = 240 \text{ V}, T_a = 150^\circ\text{C}$                | $I_R$       | -<br>- | 100<br>100 | nA<br>$\mu\text{A}$ |
| Junction Capacitance<br>at $V_R = 0 \text{ V}, f = 1 \text{ MHz}$                                               | $C_j$       | -      | 5          | pF                  |
| Reverse Recovery Time<br>at $I_F = 10 \text{ mA}, V_R = 6 \text{ V}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$ | $t_{rr}$    | -      | 50         | ns                  |



# BAV35WS-AH

## Electrical Characteristics Curves

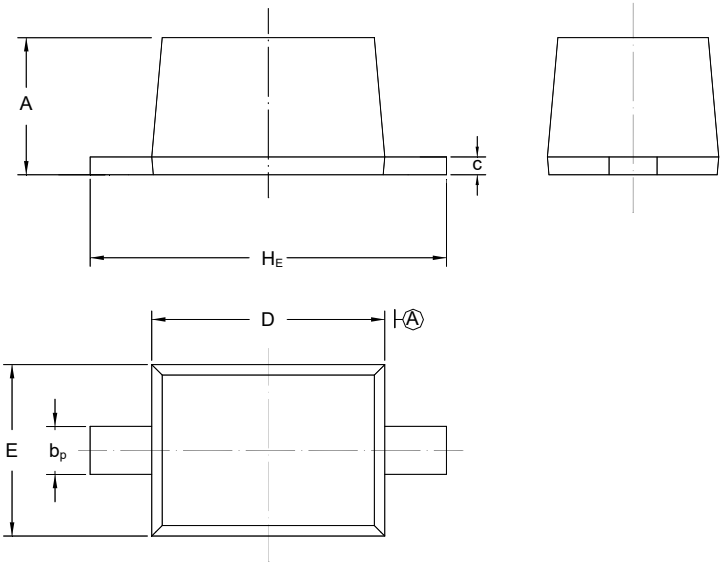


# BAV35WS-AH

## PACKAGE OUTLINE

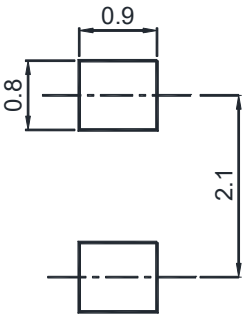
Plastic surface mounted package; 2 leads

SC-76



| UNIT | A            | b <sub>p</sub> | C            | D            | E            | H <sub>E</sub> |
|------|--------------|----------------|--------------|--------------|--------------|----------------|
| mm   | 1.10<br>0.80 | 0.40<br>0.25   | 0.15<br>0.10 | 1.80<br>1.60 | 1.35<br>1.15 | 2.80<br>2.30   |

### Recommended Soldering Footprint



### Packing information

| Package | Tape Width (mm) | Pitch   |               | Reel Size |      | Per Reel Packing Quantity |
|---------|-----------------|---------|---------------|-----------|------|---------------------------|
|         |                 | mm      | inch          | mm        | inch |                           |
| SC-76   | 8               | 4 ± 0.1 | 0.157 ± 0.004 | 178       | 7    | 3,000                     |

### Marking information

" III " = Cathode line  
" WO " = Part No.  
" • " = HAF (Halogen and Antimony Free)  
Font type: Arial

