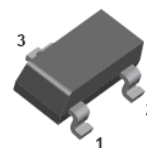
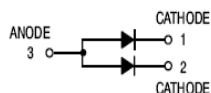


## Surface mount switching diode

# BAW56

## FEATURES

- For high-speed switching Applications.
- Common anode



**SOT-23**

## APPLICATIONS

- High speed switching application.

## ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| BAW56    | A1      | SOT-23       |

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

| Characteristic                                                                        | Symbol                          | Limits      | Unit |
|---------------------------------------------------------------------------------------|---------------------------------|-------------|------|
| Non-repetitive peak reverse voltage                                                   | $V_{RM}$                        | 100         | V    |
| Peak Repetitive Reverse Voltage<br>Working peak reverse voltage<br>DC Reverse Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 75          | V    |
| Forward Continuous Current                                                            | $I_F$                           | 300         | mA   |
| Non-repetitive forward Surge Current<br>@t=1.0ms<br>@t=1.0s                           | $I_{FSM}$                       | 2.0<br>1.0  | A    |
| Power Dissipation                                                                     | $P_D$                           | 350         | mW   |
| Thermal resistance junction to ambient air                                            | $R_{\theta JA}$                 | 357         | °C/W |
| Operating Junction Temperature Range                                                  | $T_j$                           | 150         | °C   |
| Storage Temperature Range                                                             | $T_{STG}$                       | -65 to +150 | °C   |

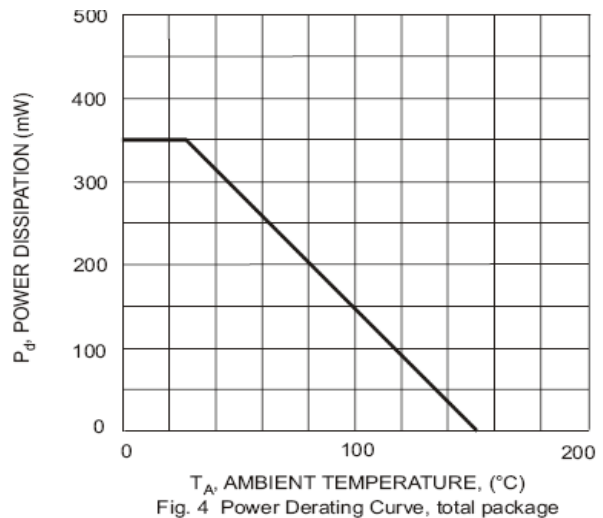
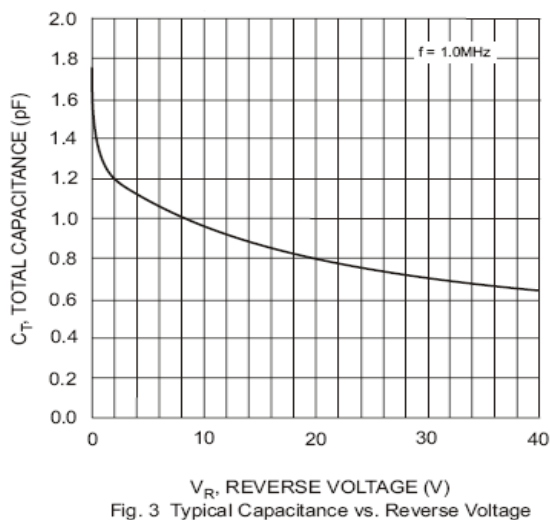
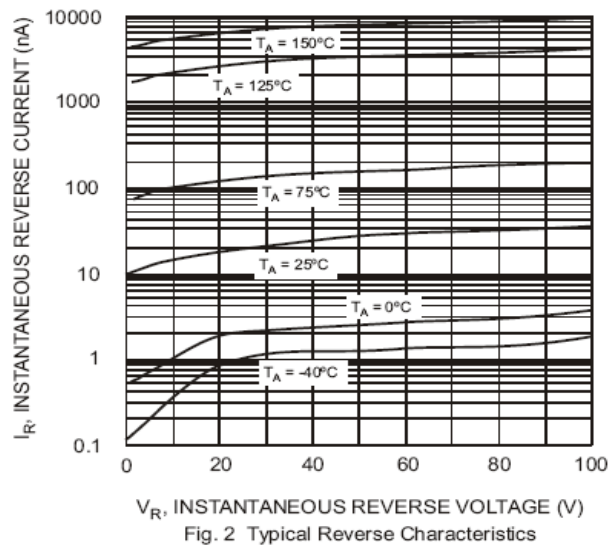
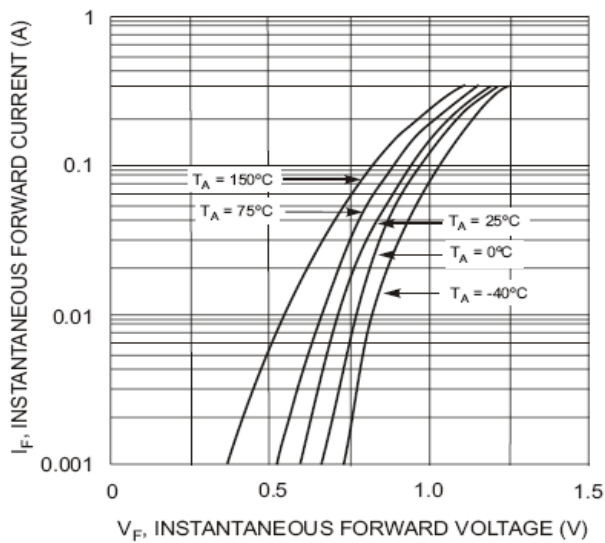
## Surface mount switching diode

## BAW56

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

| Characteristic            | Symbol      | Min | MAX                        | UNIT          | Test Condition                                                |
|---------------------------|-------------|-----|----------------------------|---------------|---------------------------------------------------------------|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | 75  | -                          | V             | $I_R = 2.5\mu A$                                              |
| Forward Voltage           | $V_F$       | -   | 715<br>855<br>1000<br>1250 | V             | $I_F = 1mA$<br>$I_F = 10mA$<br>$I_F = 50mA$<br>$I_F = 150mA$  |
| Reverse Leakage Current   | $I_R$       | -   | 2.5<br>25                  | $\mu A$<br>nA | $V_R = 75V$<br>$V_R = 20V$                                    |
| Diode Capacitance         | $C_D$       | -   | 2                          | pF            | $V_R = 0V, f = 1MHz$                                          |
| Reverse Recovery Time     | $t_{rr}$    | -   | 4                          | ns            | $I_F = I_R = 10mA$ ,<br>$I_{rr} = 0.1 * I_R, R_L = 100\Omega$ |

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



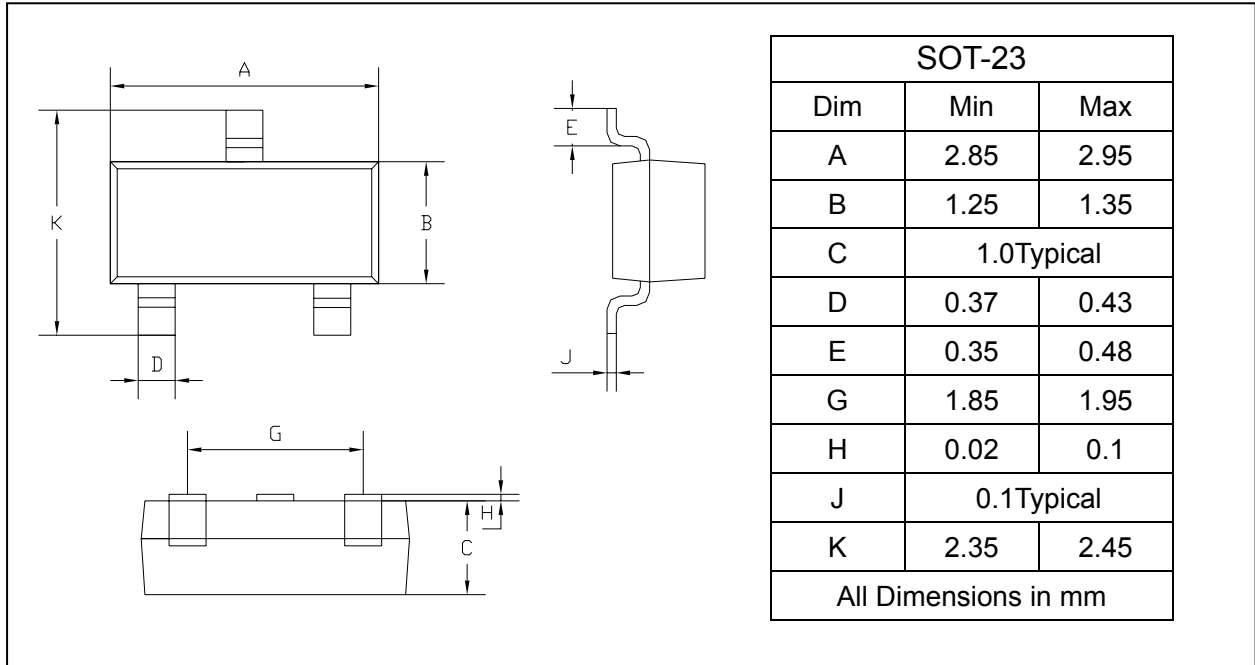
## Surface mount switching diode

**BAW56**

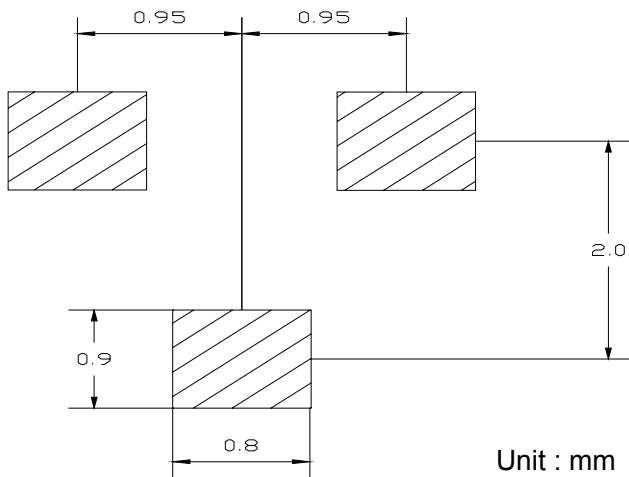
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

| Device | Package | Shipping       |
|--------|---------|----------------|
| BAW56  | SOT-23  | 3000/Tape&Reel |