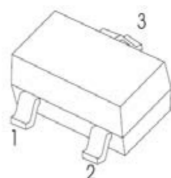
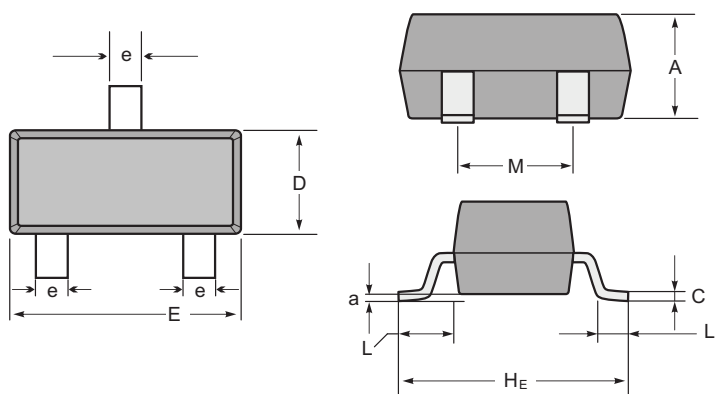
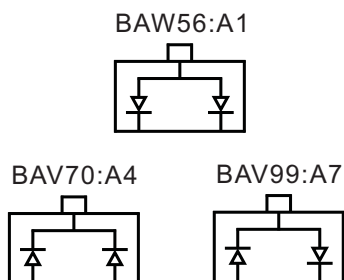


### FEATURES

- Fast switching speed.
- For general purpose switching applications.
- High conductance.



### Marking



SOT-23 mechanical data

| UNIT |     | A   | C    | D   | E   | HE  | e   | M    | L          | L <sub>1</sub> | a    |
|------|-----|-----|------|-----|-----|-----|-----|------|------------|----------------|------|
| mm   | max | 1.1 | 0.15 | 1.4 | 3.0 | 2.6 | 0.5 | 1.95 | 0.55 (ref) | 0.36 (ref)     | 0.0  |
|      | min | 0.9 | 0.08 | 1.2 | 2.8 | 2.2 | 0.3 | 1.7  |            |                | 0.15 |
| mil  | max | 43  | 6    | 55  | 118 | 102 | 20  | 77   | 22 (ref)   | 14 (ref)       | 0.0  |
|      | min | 35  | 3    | 47  | 110 | 87  | 12  | 67   |            |                | 6    |

Non-Repetitive Peak Forward Surge Current  
@t=8.3ms

### MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

| Symbol           | Parameter                                             | Vaule    | Unit |
|------------------|-------------------------------------------------------|----------|------|
| V <sub>R</sub>   | Reverse Voltage                                       | 100      | V    |
| I <sub>F</sub>   | Forward Current                                       | 0.2      | A    |
| I <sub>FSM</sub> | Non-Repetitive Peak Forward Surge Current<br>@t=8.3ms | 2        | A    |
| P <sub>D</sub>   | Total Device Dissipation                              | 0.225    | W    |
| R <sub>θJA</sub> | Thermal Resistance Form Junction to Ambient           | 556      | °C/W |
| T <sub>J</sub>   | Junction Temperature                                  | 150      | °C   |
| T <sub>STG</sub> | Storage Temperature                                   | -55~+150 | °C   |

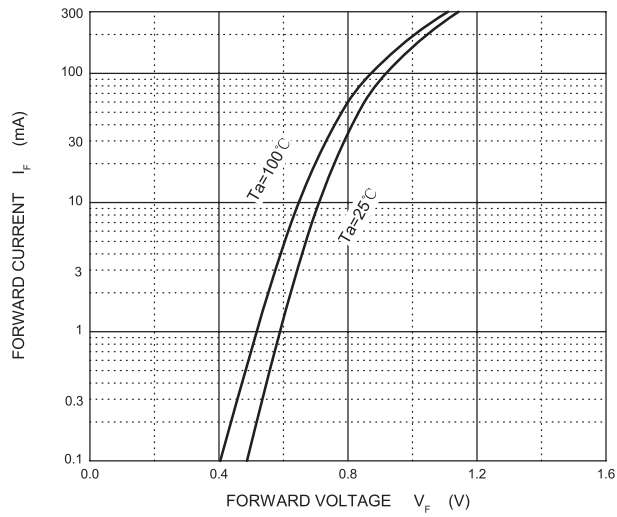
# BAW56LT1G

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

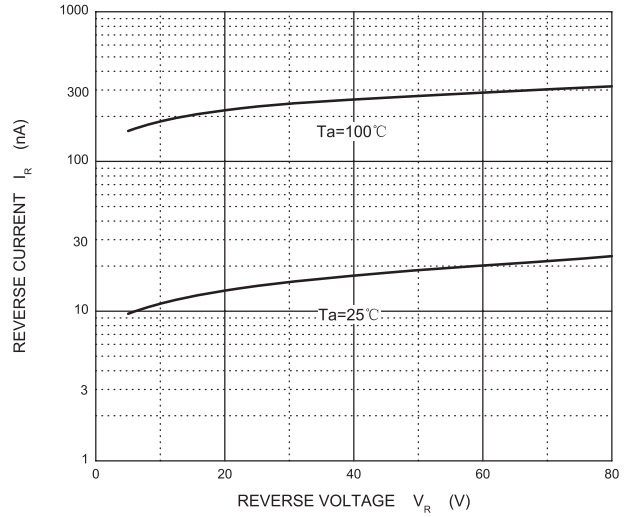
| Parameter                 | Symbol     | Test Condition                                            | Min. | Typ. | Max.  | Units   |
|---------------------------|------------|-----------------------------------------------------------|------|------|-------|---------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R=100\mu A$                                            | 100  |      |       | V       |
| Forward voltage           | $V_{F2}$   | $I_F=1mA$                                                 |      |      | 0.715 | V       |
|                           | $V_{F3}$   | $I_F=10mA$                                                |      |      | 0.855 | V       |
|                           | $V_{F4}$   | $I_F=50mA$                                                |      |      | 1     | V       |
|                           | $V_{F5}$   | $I_F=150mA$                                               |      |      | 1.25  | V       |
| Reverse current           | $I_R$      | $V_R=25V$                                                 |      |      | 2.5   | $\mu A$ |
| Diode capacitance         | $C_T$      | $V_R=1V, f=1MHz$                                          |      |      | 1.5   | pF      |
| Reverse recovery time     | $t_{rr}$   | $I_F=I_R=10mA,$<br>$I_{RR}=0.1 \times I_R, R_L=100\Omega$ |      |      | 6     | nS      |

## RATING AND CHARACTERISTIC CURVES (BAW56LT1G)

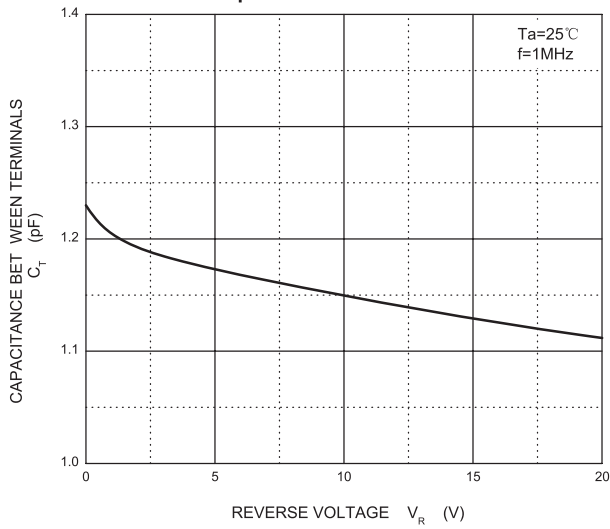
**Forward Characteristics**



**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**

