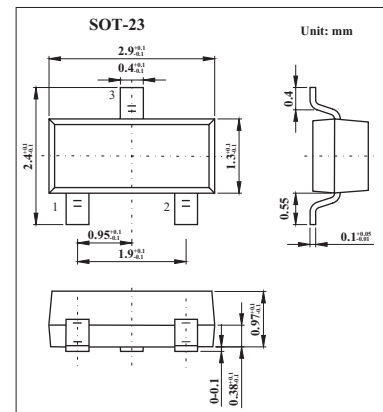


Low-leakage double diode

BAV199

■ Features

- Plastic SMD package
- Low leakage current: typ. 3 pA
- Switching time: typ. 0.8 μ s
- Continuous reverse voltage: max. 75 V
- Repetitive peak reverse voltage: max. 85 V
- Repetitive peak forward current: max. 500 mA.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Max | Unit |
|---|------------------|---|-----|------|------------------|
| Repetitive peak reverse voltage | V_{RRM} | | | 85 | V |
| Continuous reverse voltage | V_R | | | 75 | V |
| Continuous forward current | I_F | single diode loaded | | 160 | mA |
| | | double diode loaded | | 140 | |
| Repetitive peak forward current | I_{FRM} | | | 500 | mA |
| Non-repetitive peak forward current | I_{FSM} | square wave; $T_j = 25^\circ\text{C}$ prior to surge; | | | A |
| | | $t = 1\ \mu\text{s}$ | | 4 | |
| | | $t = 1\ \text{ms}$ | | 1 | |
| | | $t = 1\ \text{s}$ | | 0.5 | |
| Total power dissipation | P_{tot} | $T_{amb} = 25^\circ\text{C}$ | | 250 | mW |
| Storage temperature | T_{stg} | | -65 | +150 | $^\circ\text{C}$ |
| Junction temperature | T_j | | | 150 | $^\circ\text{C}$ |
| thermal resistance from junction to tie-point | $R_{th\ j-t\ p}$ | | | 360 | K/W |
| thermal resistance from junction to ambient | $R_{th\ j-a}$ | | | 500 | K/W |

BAV199■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Typ | Max | Unit |
|-----------------------|----------|--|-------|------|---------------|
| Forward voltage | V_F | $I_F = 1\text{ mA}$ | | 900 | mV |
| | | $I_F = 10\text{ mA}$ | | 1000 | |
| | | $I_F = 50\text{ mA}$ | | 1100 | |
| | | $I_F = 150\text{ mA}$ | | 1250 | |
| Reverse current | I_R | $V_R = 75\text{ V}$ | 0.003 | 5 | nA |
| | | $V_R = 75\text{ V}; T_j = 150^\circ\text{C}$ | 3 | 80 | |
| Diode capacitance | C_d | $f = 1\text{ MHz}; V_R = 0;$ | 2 | | pF |
| Reverse recovery time | t_{rr} | when switched from $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA};$ $R_L = 100\ \Omega$; measured at $I_R = 1\text{ mA};$ | 0.8 | 3 | μs |

■ Marking

| | |
|---------|-----|
| Marking | JYp |
|---------|-----|