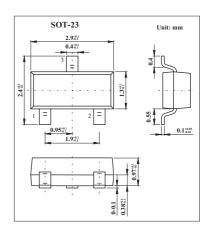
SMD Type Diodes

High-speed double diode BAV74

Features

- Small plastic SMD package
- High switching speed: max.4 ns
- Continuous reverse voltage: max. 50 V
- Repetitive peak reverse voltage: max. 60 V
- Repetitive peak forward current: max. 450 mA



■ Absolute Maximum Ratings Ta = 25°C

| Parameter | Symbol | Conditions | Min | Max | Unit |
|---|----------|--------------------------------------|-----|------|------------|
| Repetitive peak reverse voltage | VRRM | | | 60 | V |
| Continuous reverse voltage | VR | | | 50 | V |
| Continuous forward current | lF | single diode loaded; Note 1 | | 215 | mA |
| | | double diode loaded; Note 1 | | 125 | |
| Repetitive peak forward current | IFRM | | | 450 | mA |
| Non-repetitive peak forward current | IFSM | square wave;Tj = 25℃ prior to surge; | | | А |
| | | t = 1 μs | | 4 | |
| | | t = 1 ms | | 1 | |
| | | t = 1 s | | 0.5 | |
| Total power dissipation | Ptot | T _{amb} = 25°C; Note 1 | | 250 | mW |
| Storage temperature | Tstg | | -65 | +150 | $^{\circ}$ |
| Junction temperature | Tj | | | 150 | $^{\circ}$ |
| thermal resistance from junction to tie-point | Rth j-tp | | | 360 | K/W |
| thermal resistance from junction to ambient | Rth j-a | | | 500 | K/W |

Note

1. Device mounted on an FR4 printed-circuit board.

SMD Type Diodes

BAV74

■ Electrical Characteristics Ta = 25°C

| Parameter | Symbol | Conditions | Max | Unit |
|-----------------------|--------|---|------|------------|
| Forward voltage | VF | IF = 1 mA | 715 | mV |
| | | IF = 10 mA | 855 | mV |
| | | IF = 100 mA | 1.0 | V |
| Reverse current | lr | V _R = 25 V | 30 | nA |
| | | V _R = 50 V | 0.1 | μА |
| | | V _R = 25 V; T _j = 150 ℃ | 30 | μ А |
| | | V _R = 50 V; T _j = 150 ℃ | 100 | μА |
| Diode capacitance | Cd | f = 1 MHz; V _R = 1 V; | 1.5 | pF |
| Reverse recovery time | trr | when switched from IF =10mA to IR = 10 mA; RL = 100 Ω ; measured at IR = 1 mA; | 4 | ns |
| Reverse recovery time | Vfr | when switched from IF =10 mA; tr = 2 0 ns; | 1.75 | V |

Marking

| Marking | JAp |
|---------|-----|