

## Dual surface mount switching diode

## BAV74

### FEATURES

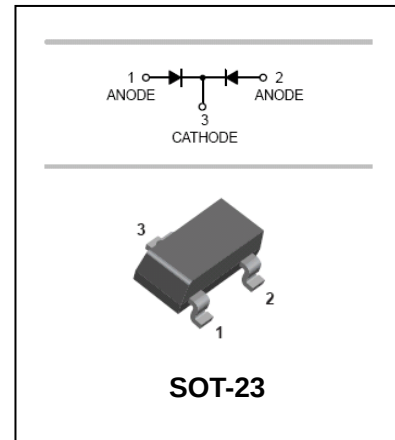
- For high-speed switching application.
- Common cathode.



Lead-free

### APPLICATIONS

- Small signal switching.



### ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| BAV74    | JA      | SOT-23       |

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

| Parameter                                | Symbol    | Limits      | Unit       |
|------------------------------------------|-----------|-------------|------------|
| Diode reverse voltage                    | $V_R$     | 50          | V          |
| Peak Reverse Voltage                     | $V_{RM}$  | 50          | V          |
| Forward Current                          | $I_F$     | 200         | mA         |
| Surge forward current, $t=1\mu s$        | $I_{FS}$  | 4.5         | A          |
| Total Power Dissipation $T_s=35^\circ C$ | $P_{tot}$ | 250         | mW         |
| Junction temperature                     | $T_j$     | 150         | $^\circ C$ |
| Storage temperature range                | $T_{stg}$ | -65 to +150 | $^\circ C$ |

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

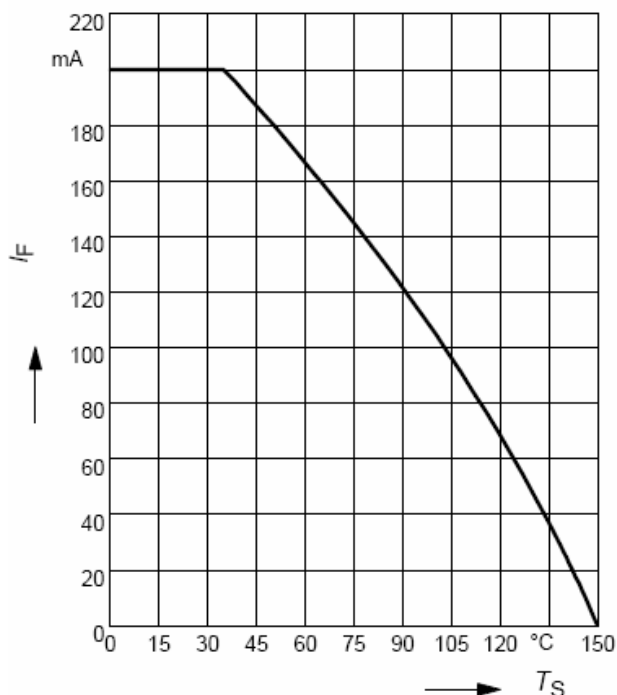
| Parameter                       | Symbol      | Test conditions                        | MIN | MAX        | UNIT    |
|---------------------------------|-------------|----------------------------------------|-----|------------|---------|
| Reverse breakdown voltage       | $V_{(BR)R}$ | $I_R=100\mu A$                         | 50  |            | V       |
| Reverse voltage leakage current | $I_R$       | $V_R=50V$<br>$V_R=50V T_A=150^\circ C$ |     | 0.1<br>100 | $\mu A$ |
| Forward voltage                 | $V_F$       | $I_F=100mA$                            |     | 1          | V       |
| Diode capacitance               | $C_D$       | $V_R=0V, f=1MHz$                       |     | 2.0        | pF      |
| Reverse recovery time           | $t_{rr}$    | $I_F=I_R=10mA, R_L=100\Omega$          |     | 4          | nS      |

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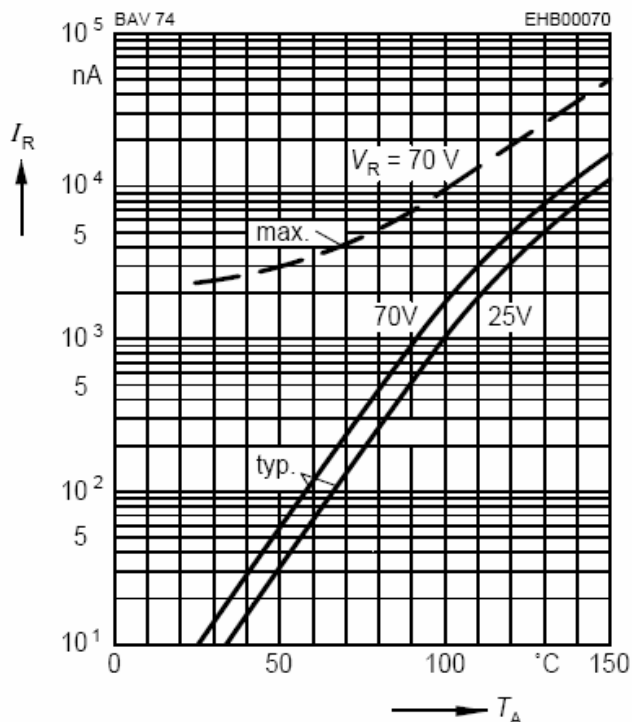
## BAV74

TYPICAL CHARACTERISTICS @  $T_a = 25^\circ\text{C}$  unless otherwise specified

**Forward current  $I_F = f(T_S)$**

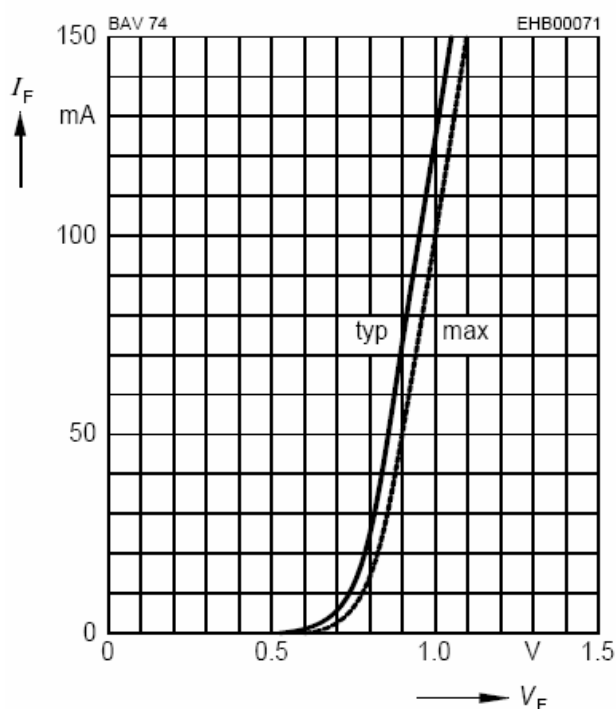


**Reverse current  $I_R = f(T_A)$**



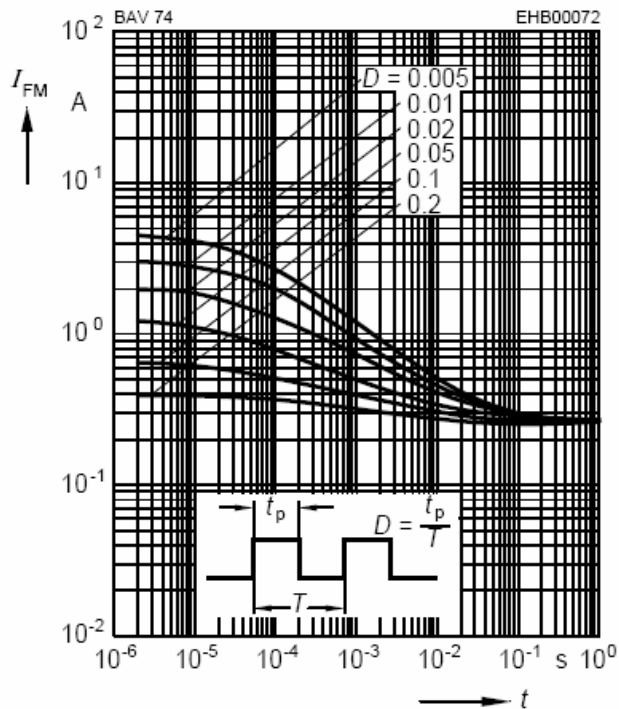
**Forward current  $I_F = f(V_F)$**

$T_A = 25^\circ\text{C}$



**Peak forward current  $I_{FM} = f(t_p)$**

$T_A = 25^\circ\text{C}$



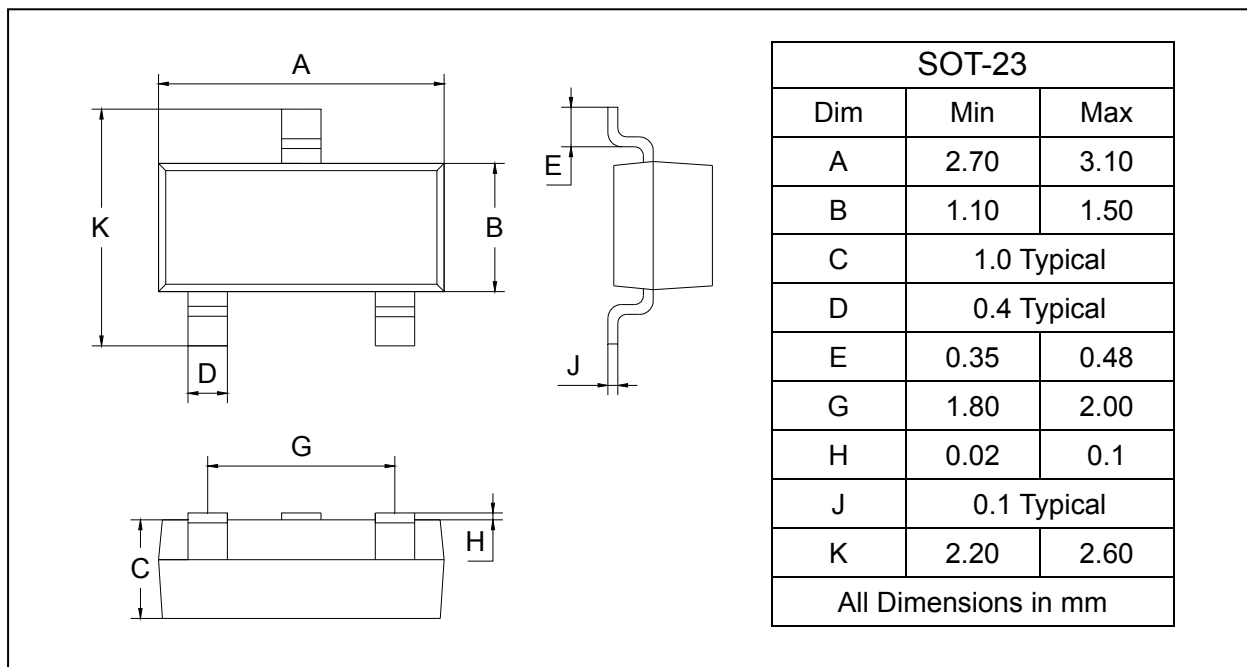
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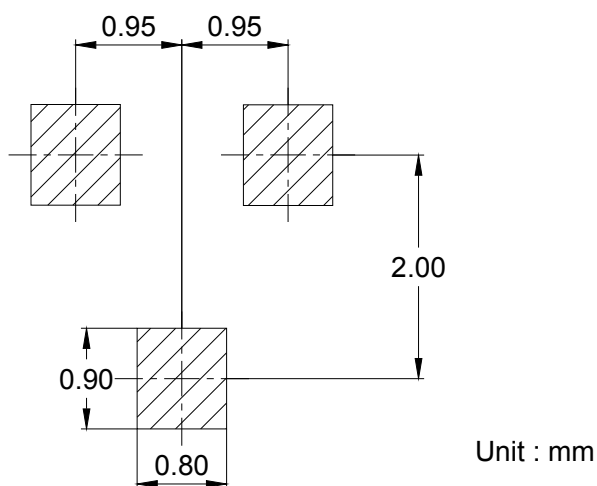
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

| Device | Package | Shipping       |
|--------|---------|----------------|
| BAV74  | SOT-23  | 3000/Tape&Reel |