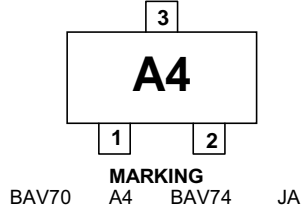
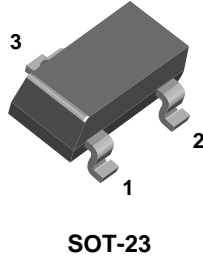
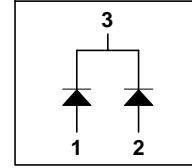


# BAV70 / 74



Connection Diagram



## Small Signal Diode

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	<b>BAV70</b> <b>BAV74</b>	V
		70 50	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	1.0 2.0	A A
$T_{stg}$	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	150	$^\circ\text{C}$

\* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**NOTES:**

- 1) These ratings are based on a maximum junction temperature of 150 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

### Thermal Characteristics

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	$^\circ\text{C}/\text{W}$

### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
$V_R$	Breakdown Voltage	<b>BAV70</b> <b>BAV74</b>	70 50		V V
		$I_R = 100 \mu\text{A}$ $I_R = 100 \mu\text{A}$			
$V_F$	Forward Voltage	<b>BAV70</b> <b>BAV74</b>		715 855 1.0 1.25 1.0	mV mV V V V
		$I_F = 1.0 \text{ mA}$ $I_F = 10 \text{ mA}$ $I_F = 50 \text{ mA}$ $I_F = 150 \text{ mA}$ $I_F = 100 \text{ mA}$			
$I_R$	Reverse Current	<b>BAV70</b> <b>BAV74</b>		60 5.0 100 100 100	$\mu\text{A}$ $\mu\text{A}$ $\mu\text{A}$ nA $\mu\text{A}$
		$V_R = 25 \text{ V}, T_A = 150^\circ\text{C}$ $V_R = 70 \text{ V}$ $V_R = 70 \text{ V}, T_A = 150^\circ\text{C}$ $V_R = 50 \text{ V}$ $V_R = 50 \text{ V}, T_A = 150^\circ\text{C}$			
$C_T$	Total Capacitance	<b>BAV70</b> <b>BAV74</b>		1.5 2.0	pF pF
		$V_R = 0, f = 1.0 \text{ MHz}$ $V_R = 0, f = 1.0 \text{ MHz}$			
$t_{rr}$	Reverse Recovery Time	<b>BAV70</b> <b>BAV74</b>		6.0 4.0	ns ns
		$I_F = I_R = 10 \text{ mA}, I_{RR} = 1.0 \text{ mA}, R_L = 100\Omega$ $I_F = I_R = 10 \text{ mA}, I_{RR} = 1.0 \text{ mA}, R_L = 100\Omega$			

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