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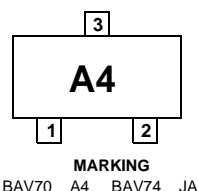
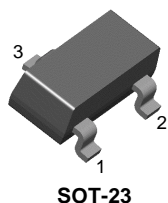
ON Semiconductor®

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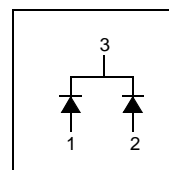
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BAV70 / 74



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	BAV70	70 V
		BAV74	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	A
		2.0	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 the diode may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 150 degrees C.
- 2) These are steady 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	BAV70	$I_R = 100\mu\text{A}$	75	V
		BAV74	$I_R = 5.0\mu\text{A}$	50	V
V_F	Forward Voltage	BAV70	$I_F = 1.0\text{mA}$	715	mV
			$I_F = 10\text{mA}$	855	mV
			$I_F = 50\text{mA}$	1.0	V
		BAV74	$I_F = 150\text{mA}$	1.25	V
			$I_F = 100\text{mA}$	1.0	V
I_R	Reverse Leakage	BAV70	$V_R = 25\text{V}, T_A = 150^\circ\text{C}$	60	μA
			$V_R = 70\text{V}$	5.0	μA
		BAV74	$V_R = 70\text{V}, T_A = 150^\circ\text{C}$	100	μA
			$V_R = 50\text{V}$	100	nA
			$V_R = 50\text{V}, T_A = 150^\circ\text{C}$	100	μA
C_T	Total Capacitance	BAV70	$V_R = 0\text{V}, f = 1.0\text{MHz}$	1.5	pF
		BAV74	$V_R = 0\text{V}, f = 1.0\text{MHz}$	2.0	pF
t_{rr}	Reverse Recovery Time	BAV70	$I_F = I_R = 10\text{mA}, I_{RR} = 1.0\text{mA}, R_L = 100\Omega$	6.0	ns
		BAV74	$I_F = I_R = 10\text{mA}, I_{RR} = 1.0\text{mA}, R_L = 100\Omega$	4.0	ns

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