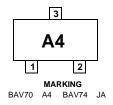


BAV70/74





Connection Diagram



Small Signal Diode

Absolute Maximum Ratings * T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units	
V _{RRM}	Maximum Repetitive Reverse Voltage	BAV70 BAV74	70 50	V 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	°C
T _J	Operating Junction Temperature		150	°C

^{*} These ratings are limiting values above which the serviceability of the diode may be impaired.

- These ratings are based on a maximum junction temperature of 150 degrees C.
 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 _{eJA}	Thermal Resistance, Junction to Ambient	357	°C/W

Electrical Characteristics TA=25°C unless otherwise noted

Symbol	Parameter		Test Conditions	Min.	Max.	Units
V _R	Breakdown Voltage	BAV70 BAV74	I _R = 100μA I _R = 5.0μA	75 50		V V
V _F	Forward Voltage	BAV70 BAV74	$I_F = 1.0 \text{mA}$ $I_F = 10 \text{mA}$ $I_F = 50 \text{mA}$ $I_F = 150 \text{mA}$ $I_F = 100 \text{mA}$		715 855 1.0 1.25 1.0	mV mV V V
I _R	Reverse Leakage	BAV70 BAV74	$V_R = 25V, T_A = 150^{\circ}C$ $V_R = 70V$ $V_R = 70V, T_A = 150^{\circ}C$ $V_R = 50V$ $V_R = 50V, T_A = 150^{\circ}C$		60 5.0 100 100	μΑ μΑ μΑ nA μΑ
C _T	Total Capacitance	BAV70 BAV74	$V_R = 0V$, $f = 1.0MHz$ $V_R = 0V$, $f = 1.0MHz$		1.5 2.0	pF pF
t _{rr}	Reverse Recovery Time	BAV70 BAV74	$\begin{aligned} &I_F = I_R = 10\text{mA}, \ I_{RR} = 1.0\text{mA}, \\ &R_L = 100\Omega \\ &I_F = I_R = 10\text{mA}, \ I_{RR} = 1.0\text{mA}, \\ &R_L = 100\Omega \end{aligned}$		6.0 4.0	ns ns

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EnSigna™	i-Lo™	OCX™	RapidConfigure™	TruTranslation™
FACT™	ImpliedDisconnect™	OCXPro™	RapidConnect™	UHC™
FACT Quiet Series™		OPTOLOGIC [®]	μSerDes™	UltraFET [®]
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