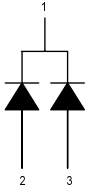


# SOT23 HIGH SPEED SWITCHING DIODE PAIR COMMON CATHODE

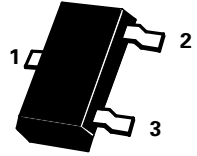
ISSUE 2 – JANUARY 1995

## BAV74

### PIN CONFIGURATION



PARTMARKING DETAIL  
BAV74 – JA



SOT23

### ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	$V_R$	50	V
Average Output Rectified Current ( $t_{av} = 10\text{ms}$ )	$I_o$	100	mA
Continuous Forward Current	$I_F$	150	mA
Peak Forward Current ( $t = 15\text{ms}$ )	$I_{FM}$	200	mA
Forward Surge Current ( $t=1\mu\text{s}$ )	$I_{FS}$	1000	mA
Power Dissipation at $T_{amb}=25^\circ\text{C}$	$P_{tot}$	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^\circ\text{C}$

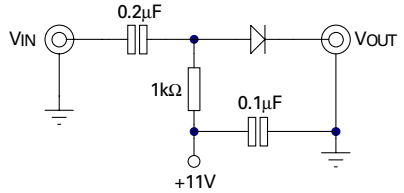
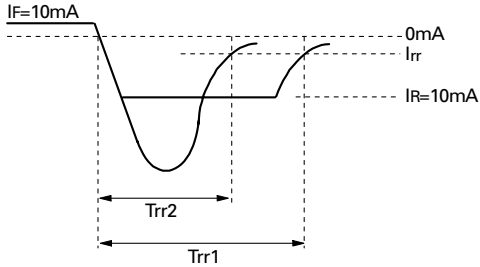
### ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Breakdown Voltage	$V_{BR}$	51		V	$I_R = 5\mu\text{A}$
Forward Voltage	$V_F$		1.0	V	$I_F = 100\text{mA}$
Reverse current	$I_R$		0.1 100	$\mu\text{A}$ $\mu\text{A}$	$V_R = 50\text{V}$ $V_R = 50\text{V}, T_{amb} = 125^\circ\text{C}$
Capacitance	$C_o$		2.0	pF	$V_R = 0$
Reverse Recovery Time	$t_{rr}$		4 2	ns ns	$I_F = I_R = 10\text{mA}, I_{RR} = 1\text{mA}$ $I_F = 10\text{mA}, V_R = 6\text{V},$ $R_L = 100\Omega$

Spice parameter data is available upon request for this device

# BAV74

## Circuit For Measuring Switching Time

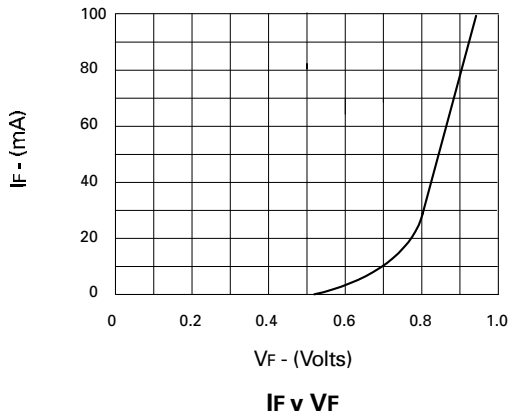


Pulse is supplied by a generator with the following characteristics:

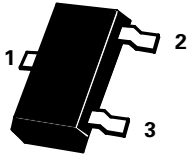
Output impedance =  $50\Omega$   
 Rise time  $\leq 0.5\text{ns}$   
 Pulse width =  $100\text{ns}$

Output is monitored on a sampling oscilloscope with the following characteristics:

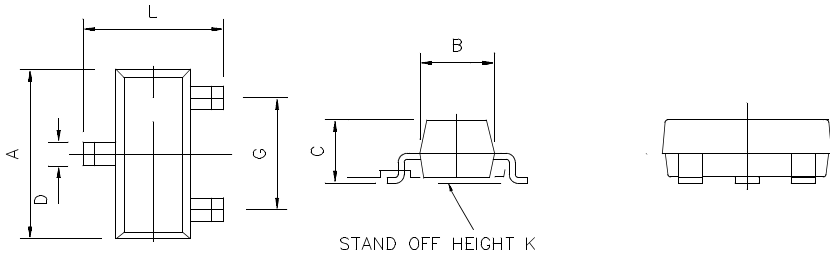
Input impedance =  $50\Omega$   
 Rise time  $\leq 0.6\text{ns}$



# BAV74



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	2.67	3.05	0.105	0.120
B	1.20	1.40	0.047	0.055
C	-	1.10	-	0.043
D	0.37	0.53	0.0145	0.021
F	0.085	0.15	0.0033	0.0059
G	NOM 1.9		NOM 0.075	
K	0.01	0.10	0.0004	0.004
L	2.10	2.50	0.0825	0.0985
N	NOM 0.95		NOM 0.37	



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