

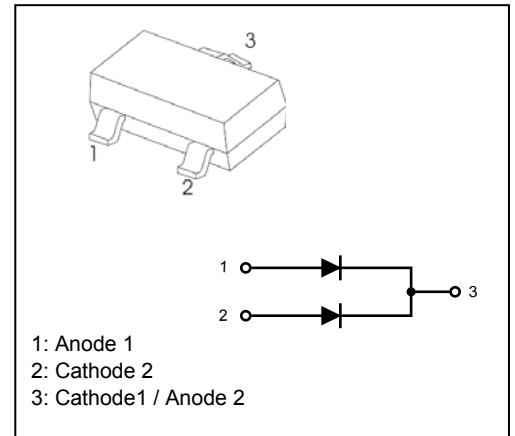
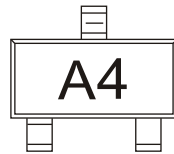
## Switching Diode

## BAV70

### FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

### Marking



SOT-23

### Maximum Ratings @T<sub>A</sub>=25°C

Parameter	Symbol	Limits	Unit
Reverse voltage	V <sub>R</sub>	70	V
Forward Current	I <sub>F</sub>	200	mA
Peak Forward Surge Current	I <sub>FM(surge)</sub>	500	mA
Power Dissipation	P <sub>D</sub>	225	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	556	°C/W
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature range	T <sub>STG</sub>	-55-150	°C

### Electrical Characteristics @T<sub>A</sub>=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V <sub>R</sub>	70			V	I <sub>R</sub> =100μA
Forward voltage	V <sub>F1</sub>			0.715	V	I <sub>F</sub> =1mA
	V <sub>F2</sub>			0.855	V	I <sub>F</sub> =10mA
	V <sub>F3</sub>			1	V	I <sub>F</sub> =50mA
	V <sub>F4</sub>			1.25	V	I <sub>F</sub> =150mA
Reverse current	I <sub>R</sub>			2.5	μA	V <sub>R</sub> =70V
Capacitance between terminals	C <sub>T</sub>			1.5	pF	V <sub>R</sub> =0, f=1MHz
Reverse recovery time	t <sub>rr</sub>			6	ns	I <sub>F</sub> = I <sub>R</sub> = 10mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω



## Typical Characteristics

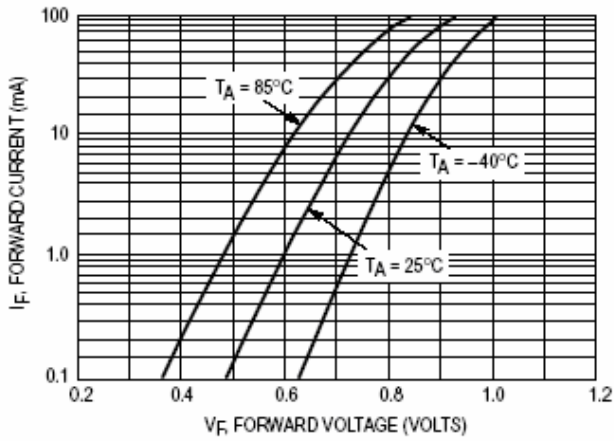


Figure 1. Forward Voltage

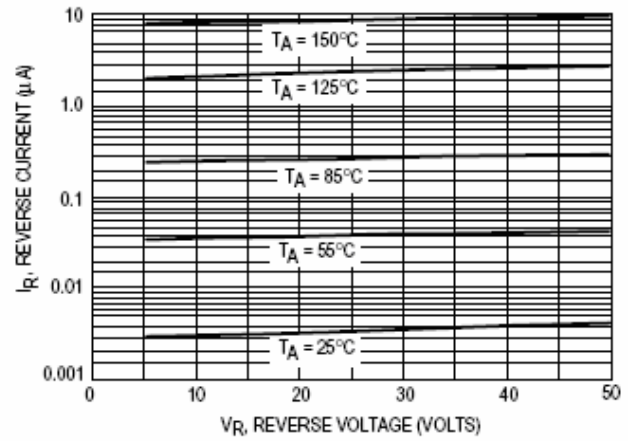


Figure 2. Leakage Current

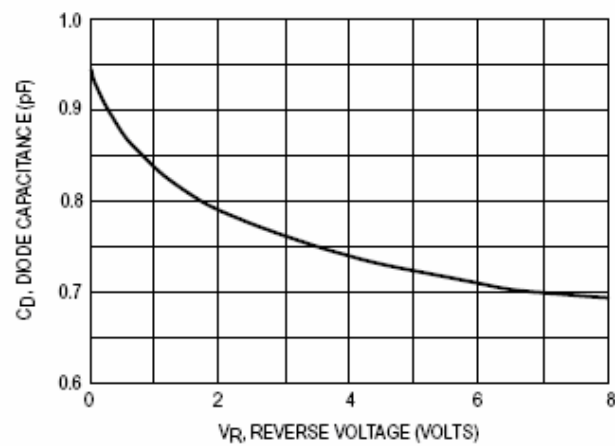
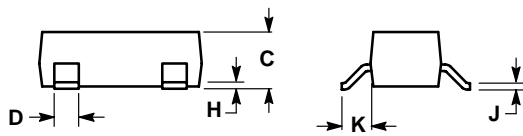
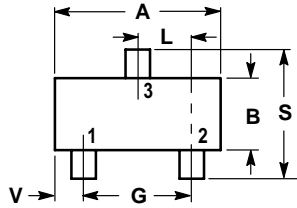


Figure 3. Capacitance



## SOT-23



### NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

- PIN 1. ANODE  
 2. NO CONNECTION  
 3. CATHODE

