

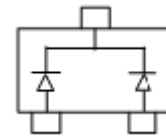
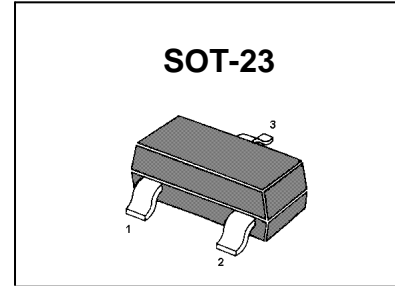
# SOT-23 Plastic-Encapsulate Diodes

## BAV70 SWITCHING DIODE

### FEATURES

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

**MARKING: A4**



### Maximum Ratings @Ta=25°C

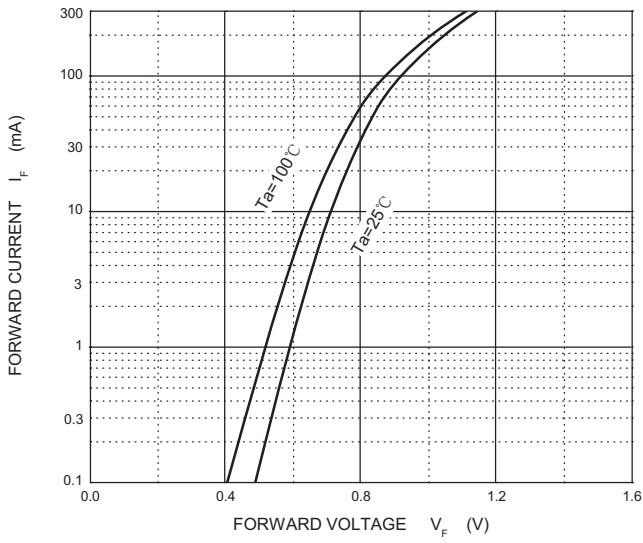
Parameter	Symbol	Limit	Unit
Maximum Peak Reverse Voltage	$V_{RM}$	100	V
Reverse Voltage	$V_R$	75	V
DC Voltage	$V_{DC}$	75	V
Forward Current	$I_F$	200	mA
Forward Average Current	$I_{FRM}$	500	mA
Non-Repetitive Peak Forward Surge Current @t=1.0μs	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C/W
Junction Temperature	$T_J$	150	°C
Storage Temperature range	$T_{STG}$	-55~+150	°C

### Electrical Characteristics @Ta=25°C

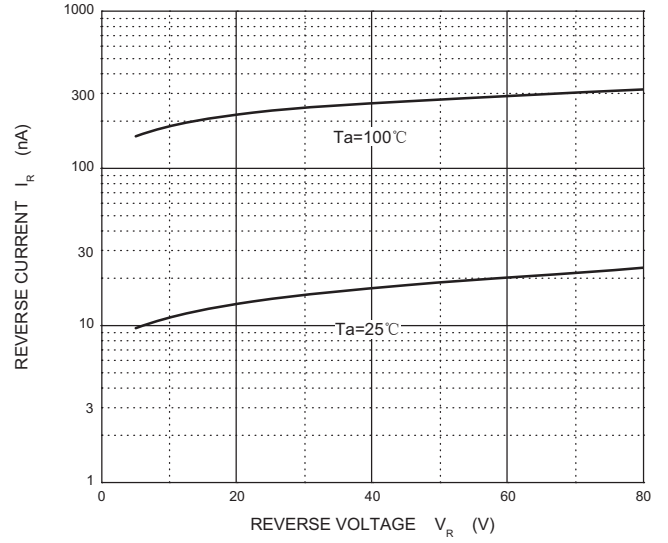
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_R$	75			V	$I_R=100\mu A$
Forward voltage	$V_{F1}$			0.715	V	$I_F=1mA$
	$V_{F2}$			0.855	V	$I_F=10mA$
	$V_{F3}$			1	V	$I_F=50mA$
	$V_{F4}$			1.25	V	$I_F=150mA$
Reverse current	$I_R$			2.5	μA	$V_R=75V$
Capacitance between terminals	$C_T$			1.5	pF	$V_R=0, f=1MHz$
Reverse recovery time	$t_{rr}$			4	ns	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

## Typical Characteristics

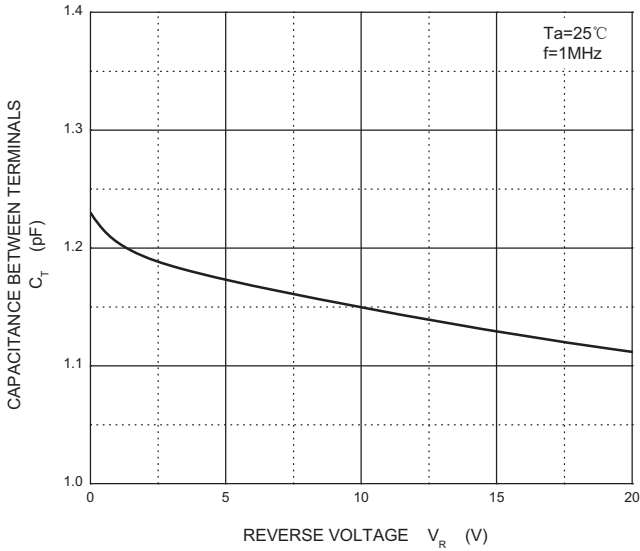
**Forward Characteristics**



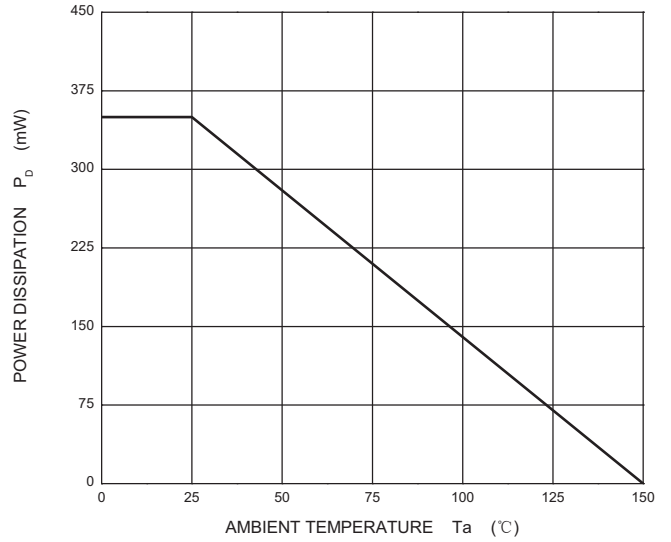
**Reverse Characteristics**



**Capacitance Characteristics**



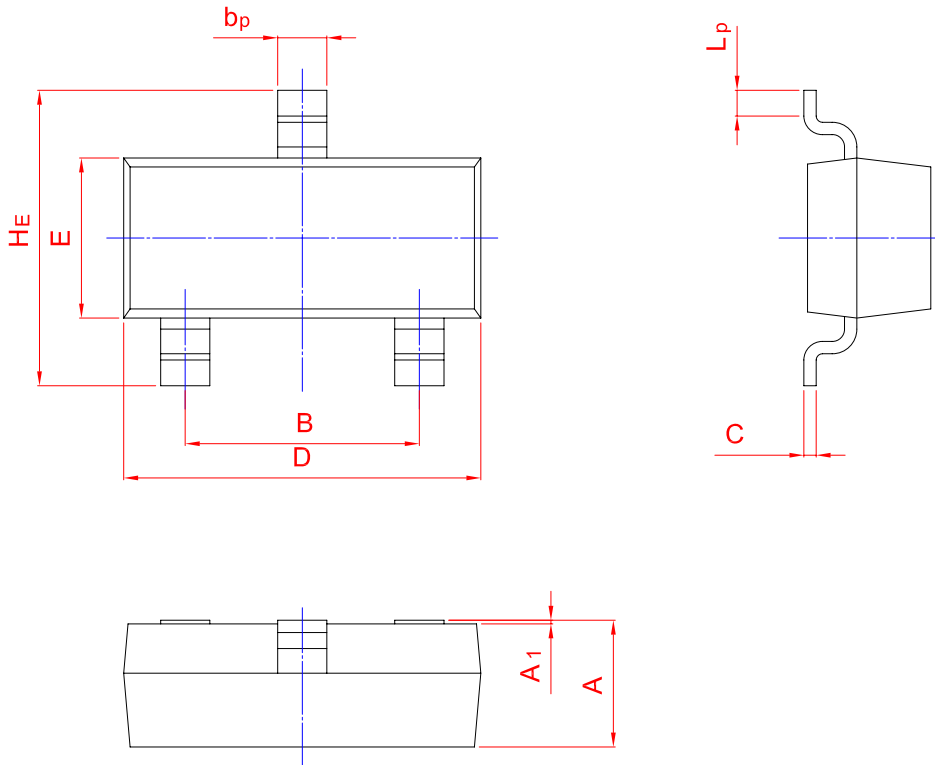
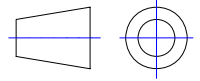
**Power Derating Curve**



# PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20