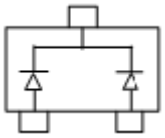
SOT-23 Plastic-Encapsulate Diodes

BAV70 SWITCHING DIODES

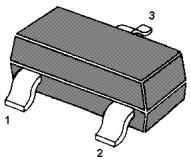
FEATURES

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

MARKING: A4



SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

Maximum Ratings @Ta=25℃

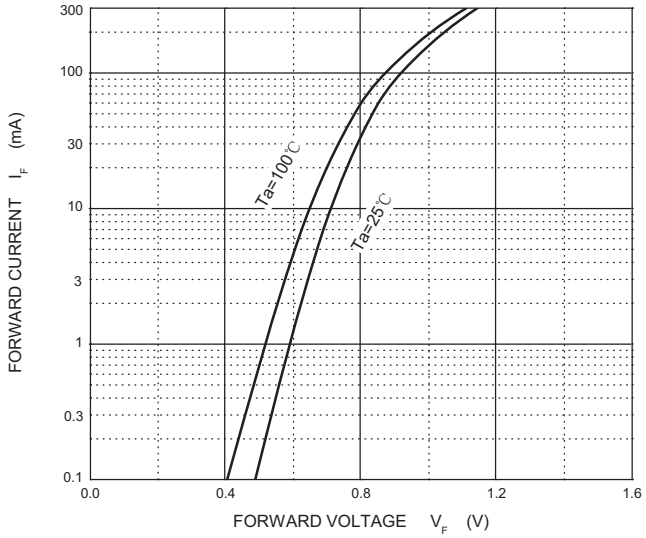
Parameter	Symbol	Limit	Unit
Reverse Breakdown Voltage	V_{RM}	70	V
DC Blocking Voltage	V_R	70	V
Forward Current	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{STG}	-55~+150	℃

Electrical Characteristics @Ta=25℃

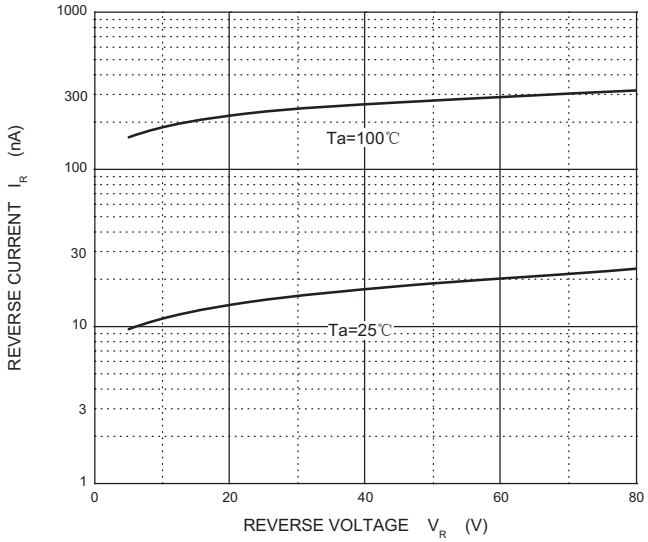
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	V_R	70			V	I_R=100μA
Forward voltage	V_{F1}			0.715	V	I_F=1mA
	V_{F2}			0.855	V	I_F=10mA
	V_{F3}			1	V	I_F=50mA
	V_{F4}			1.25	V	I_F=150mA
Reverse current	I_R			2.5	μA	V_R=70V
Capacitance between terminals	C_T			1.5	pF	V_R=0,f=1MHz
Reverse recovery time	t_{rr}			6	ns	I_F = I_R = 10mA, Irr= 0.1 x I_R, R_L = 100Ω

Typical Characteristics

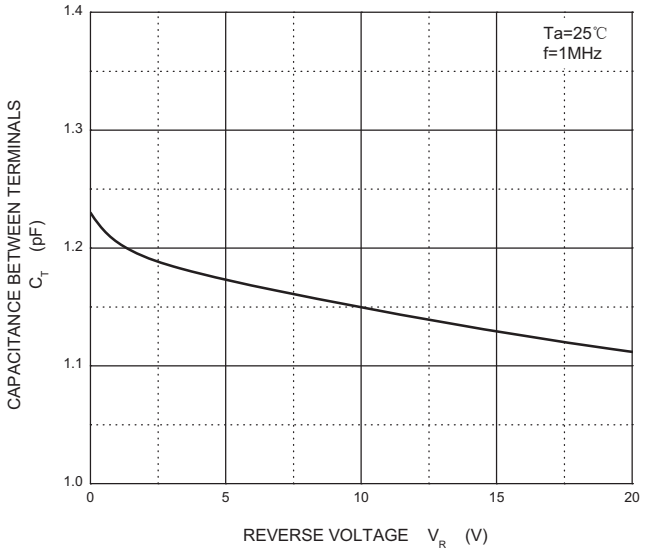
Forward Characteristics



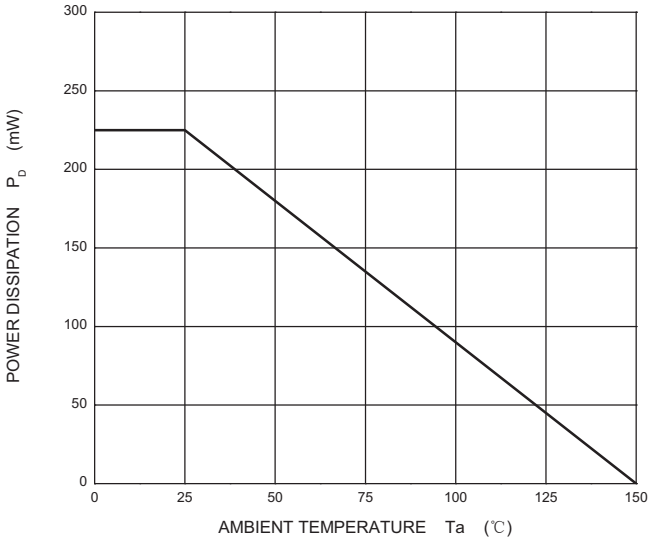
Reverse Characteristics



Capacitance Characteristics

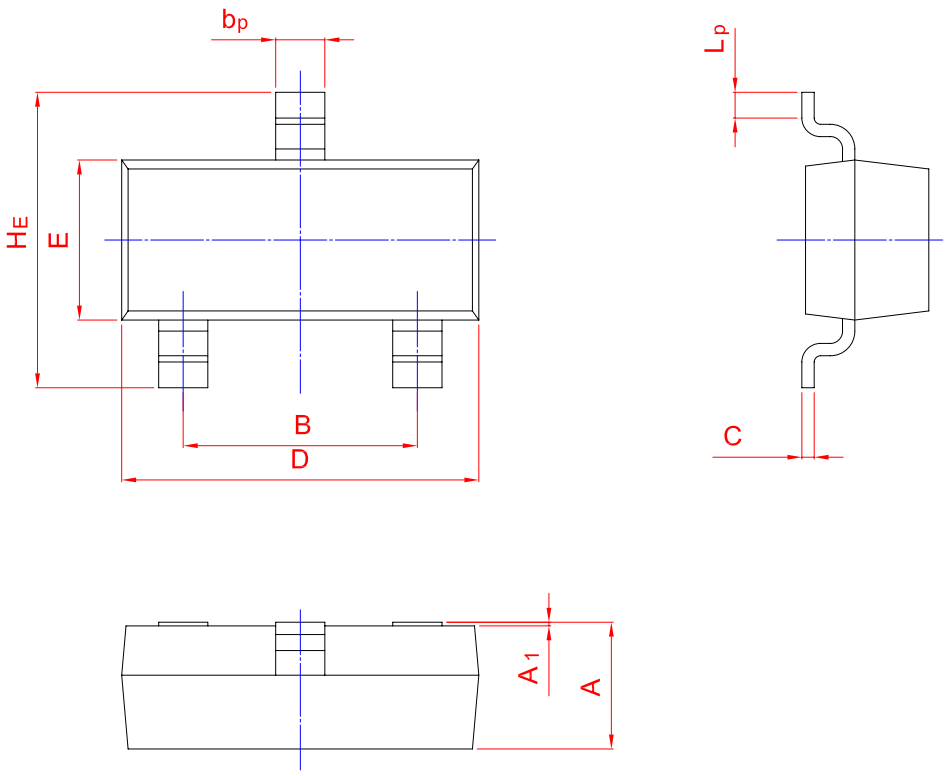


Power Derating Curve



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