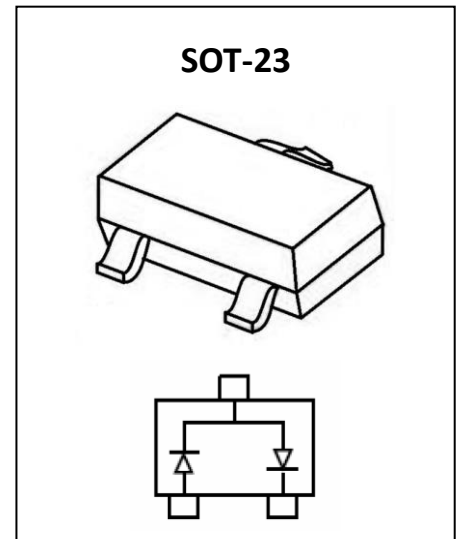


BAV99 Switching Diodes
Feature

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

MARKING: A7

ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

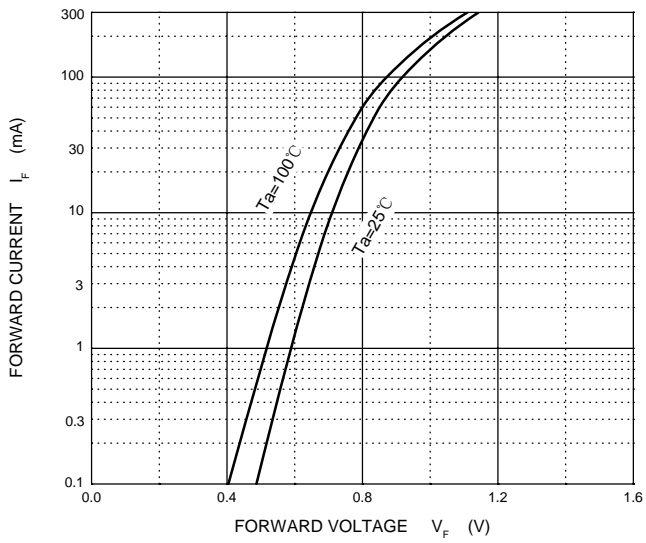
Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Forward Current	I_F	0.20	A
Reverse current	I_R	2.5	μA
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ ms}$	I_{FSM}	2.0	A
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	$^{\circ}\text{C}/\text{W}$
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

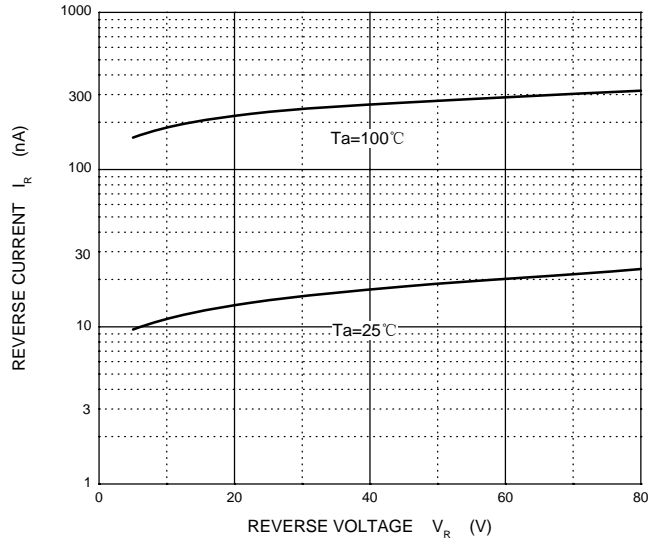
Parameter	Symbol	Test Condition	Min	Max	Unit
Forward voltage	V_F	$I_F = 1\text{mA}$		0.715	V
		$I_F = 10\text{mA}$		0.855	V
		$I_F = 50\text{mA}$		1.0	V
		$I_F = 150\text{mA}$		1.25	V
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 100\mu\text{A}$	75		V
Reverse current	I_R	$V_R = 70\text{V}$		2.5	μA
Capacitance between terminals	C_T	$V_R=0, f=1\text{MHz}$		2	pF
Reverse Recovery Time	T_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$		6	ns

Typical Electrical and Thermal Characteristics

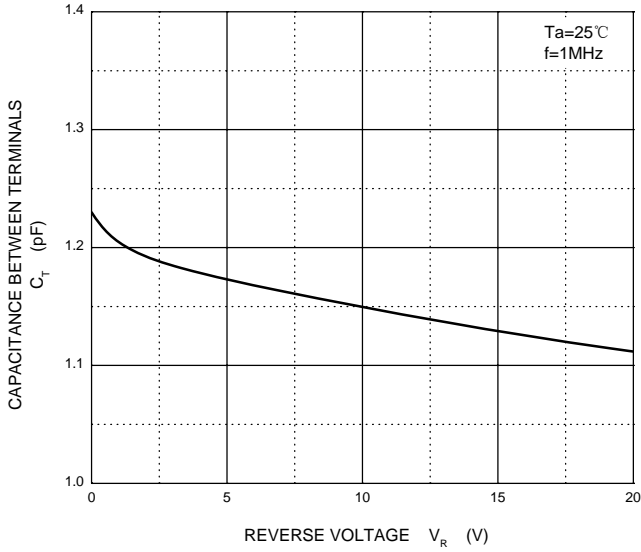
Forward Characteristics



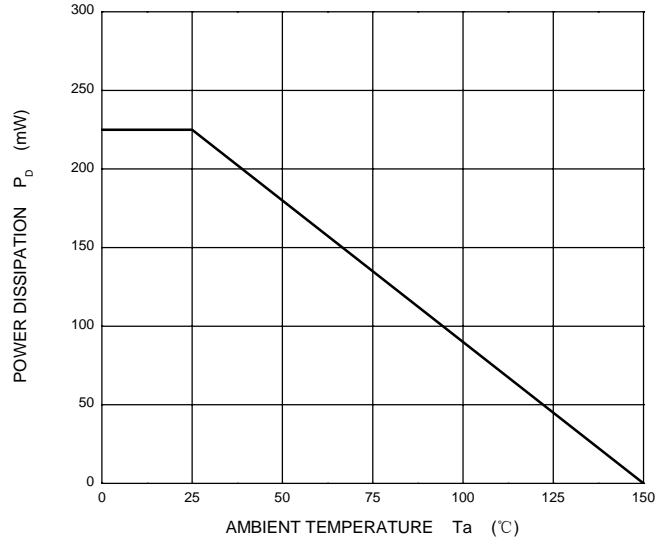
Reverse Characteristics



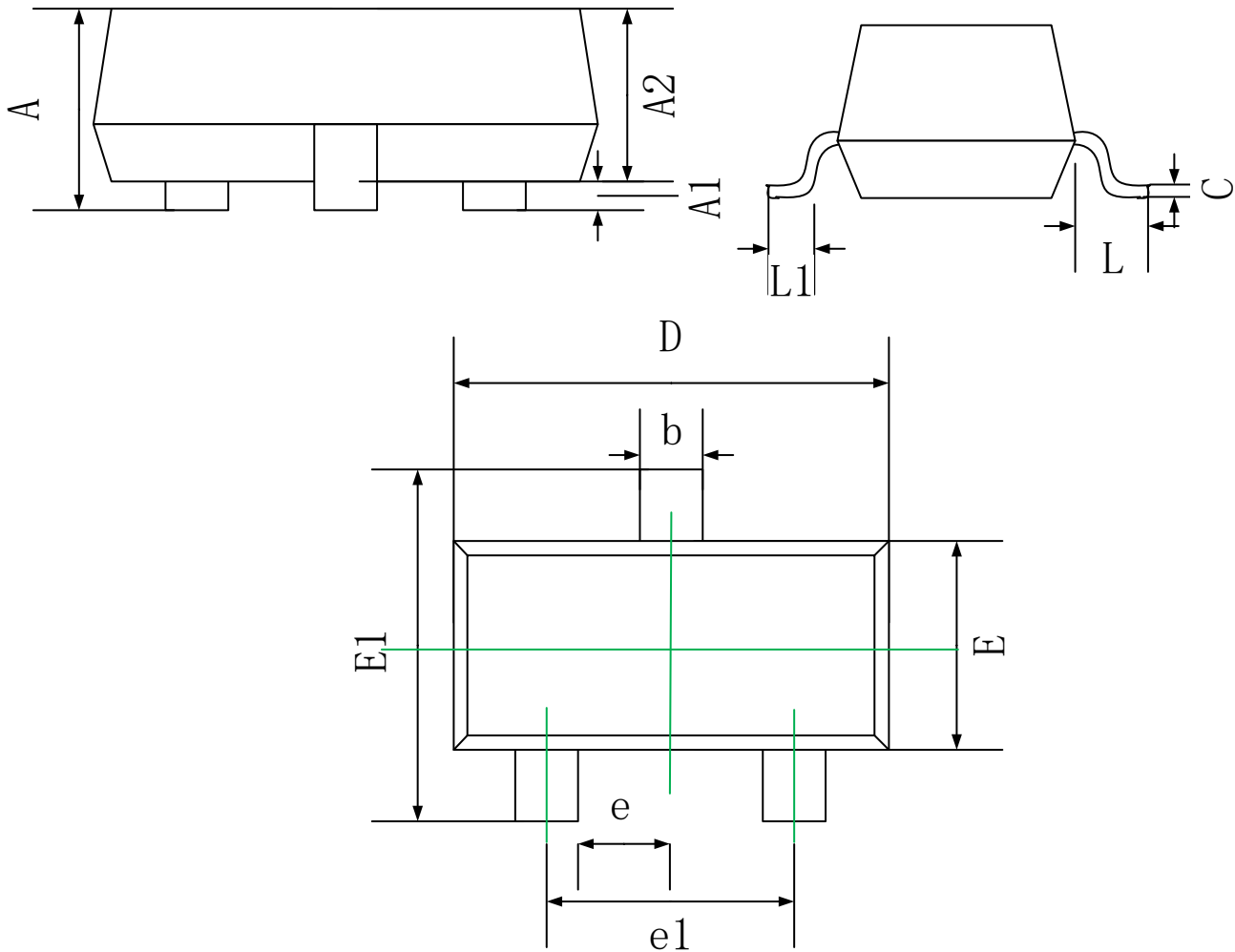
Capacitance Characteristics



Power Derating Curve



SOT-23 Package Information



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50