

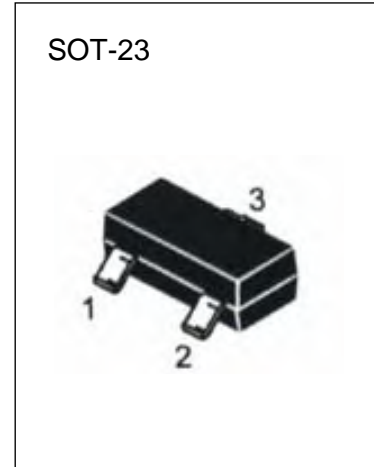
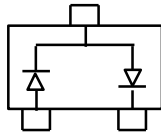


### BAV99

#### Features

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

Marking: A7



#### Maximum Ratings ( $T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_R$	Reverse Voltage	70	V
$I_F$	Forward Current	200	mA
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
$P_D$	Power Dissipation	225	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	556	$^{\circ}\text{C/W}$
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^{\circ}\text{C}$

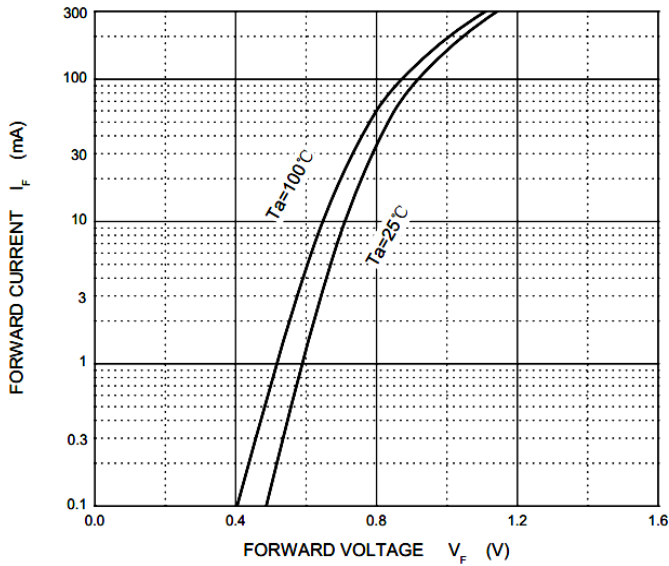
#### Electrical Characteristics ( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

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

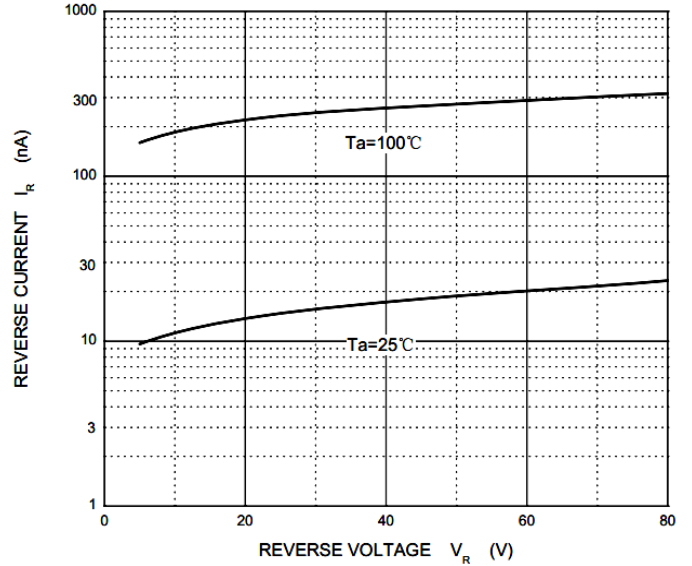


### Typical Characteristics

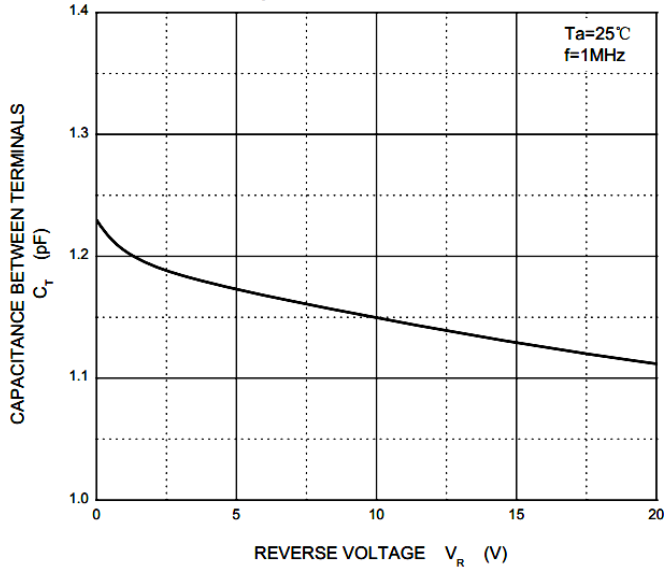
Forward Characteristics



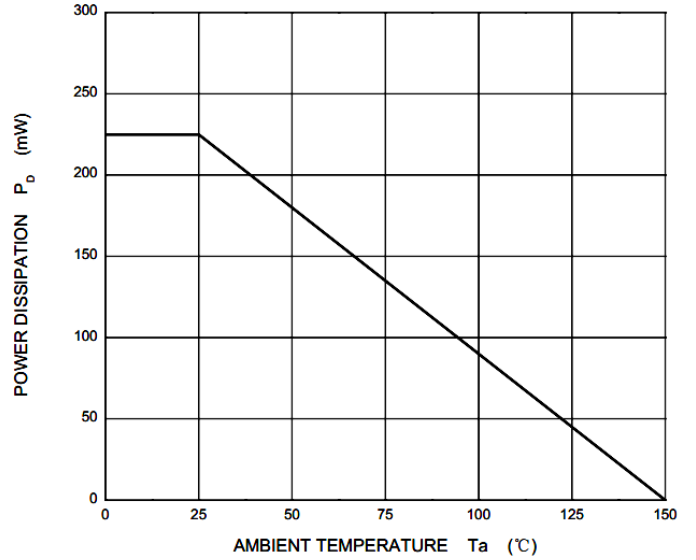
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve





Package Dimensions

SOT-23

unit:mm

