

# BAV99

## SWITCHING DIODE

<b>VOLTAGE</b>	<b>70 Volt</b>	<b>POWER</b>	<b>225 mWatt</b>
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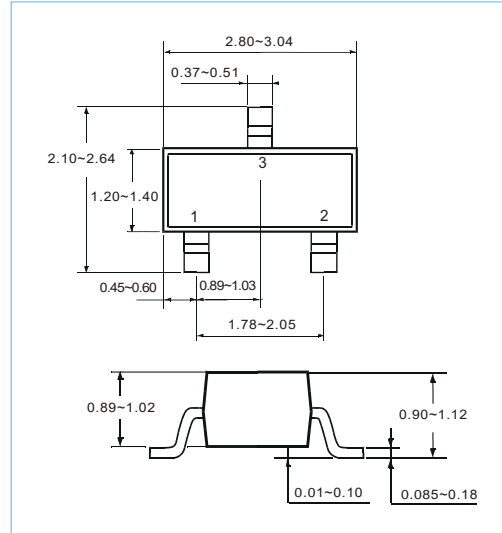
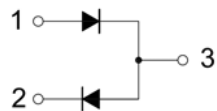
**SOT-23** Unit:mm

### FEATURES

- Fast Switching Speed
- EFor General Purpose Switching Applications
- High Conductance
- Lead free in compliance with EU RoHS
- Marking code: A7

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



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

Parameter	Symbol	Limit	Unit
Reverse Voltage	$V_R$	70	V
Forward Current	$I_F$	200	mA
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 range	$T_{STG}$	-55~+150	$^{\circ}\text{C}$

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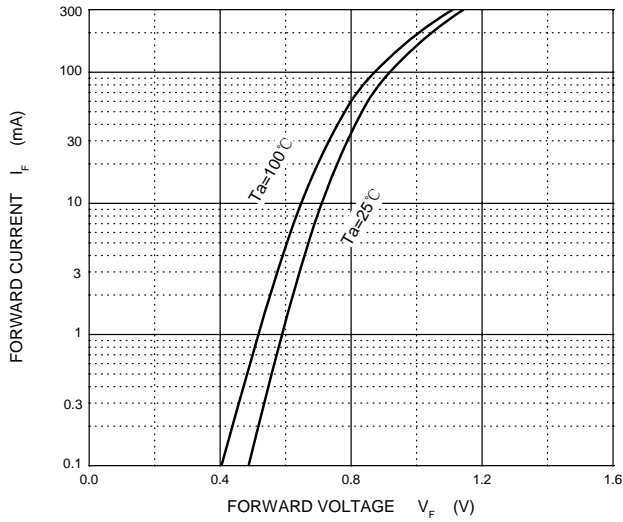
### ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ unless otherwise specified)

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

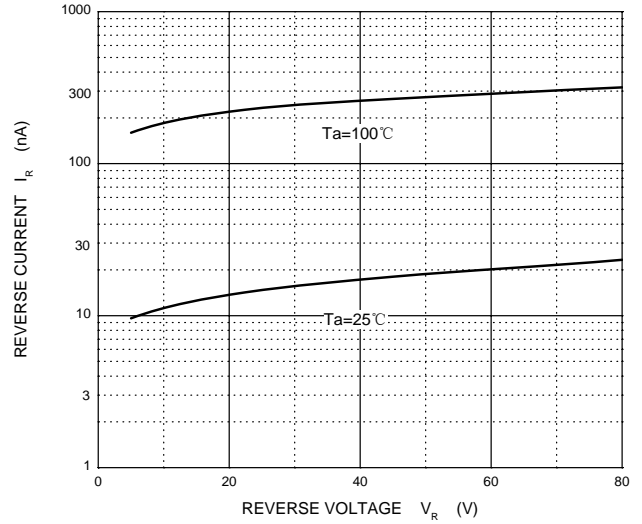
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## Typical Characteristics

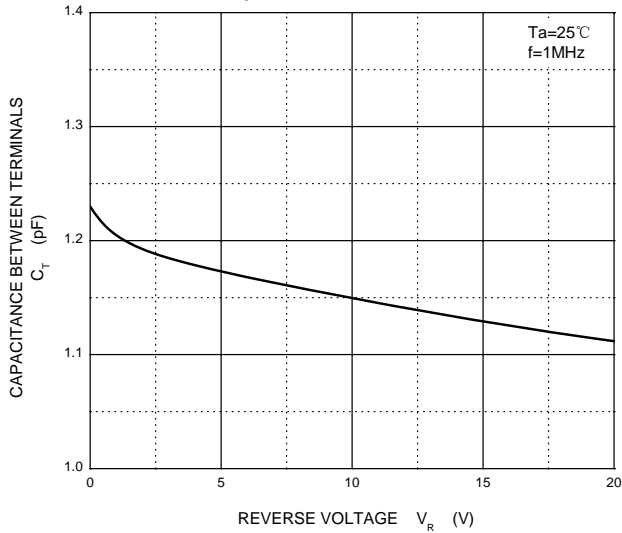
**Forward Characteristics**



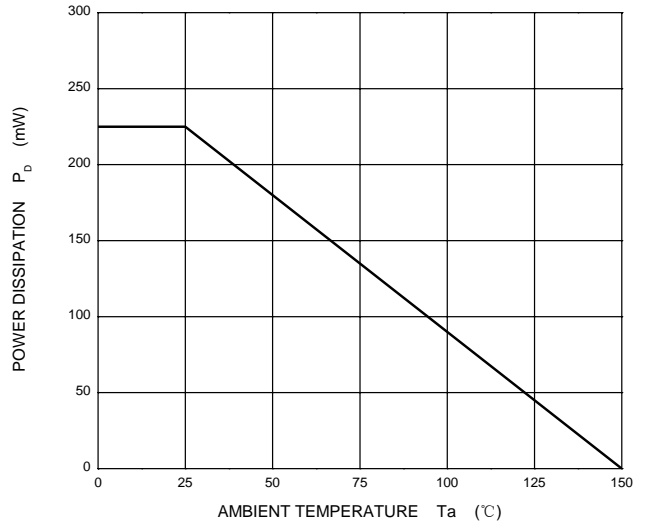
**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**

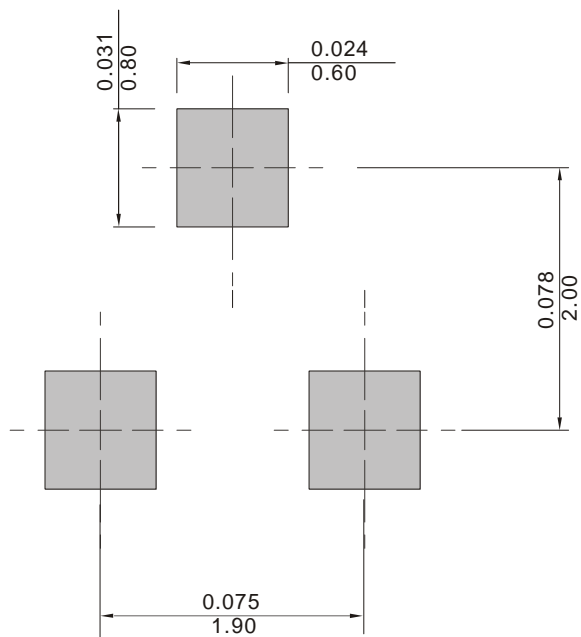


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## MOUNTING PAD LAYOUT

SOT-23

Unit:Inch(mm)



## ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BAV99	SOT-23	7 Inch	3000