

BAV170

SWITCHING DIODE

VOLTAGE	85 Volt	POWER	250 mW
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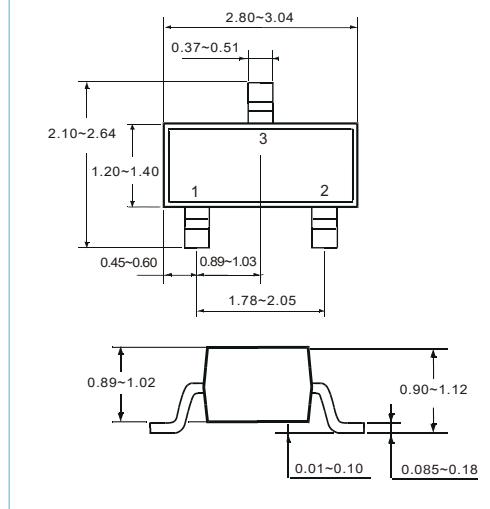
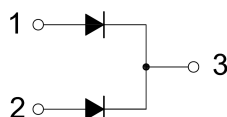
SOT-23 Unit:mm

FEATURES

- Fast Switching Speed
- Low Reverse Current
- Lead free in compliance with EU RoHS
- Marking code: JX

MECHANICAL DATA

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



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

Parameter	Symbol	Value	Units
Peak reverse voltage	V_{RM}	85	V
Reverse voltage	V_R	75	V
Forward Current(single diode)	I_F	215	mA
Forward Current(double diode)		125	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-repetitive Peak Forward surge current @ $t=8.3\text{ms}$	I_{FSM}	1.0	A
Power dissipation	P_D	250	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

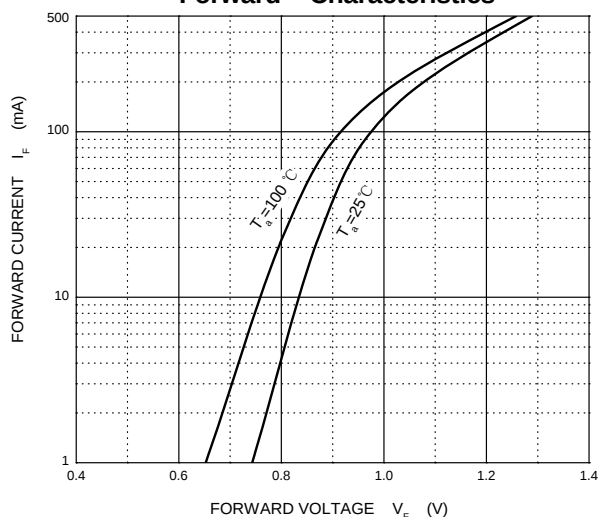
ELECTRICAL CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	($I_R = 100 \mu\text{A}$)	75			V
Reverse current	I_R	($V_R = 75\text{V}$)			5	nA
Forward Voltage	V_F	($I_F = 1.0 \text{ mA}$) ($I_F = 10 \text{ mA}$) ($I_F = 50 \text{ mA}$) ($I_F = 150 \text{ mA}$)			0.9 1.0 1.10 1.25	V
Total Capacitance	C_T	($V_R = 0 \text{ V}$, $f = 1.0 \text{ MHz}$)		2.0		pF
Reverse Recovery Time	t_{rr}	$I_F=10\text{mA}$, $I_R=10\text{mA}$, $I_{rr}=0.1I_R$, $R_L=100 \Omega$			3.0	us

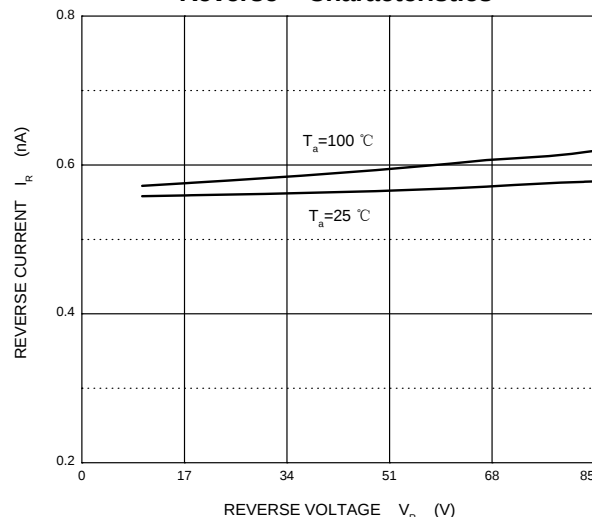
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Typical Characteristics

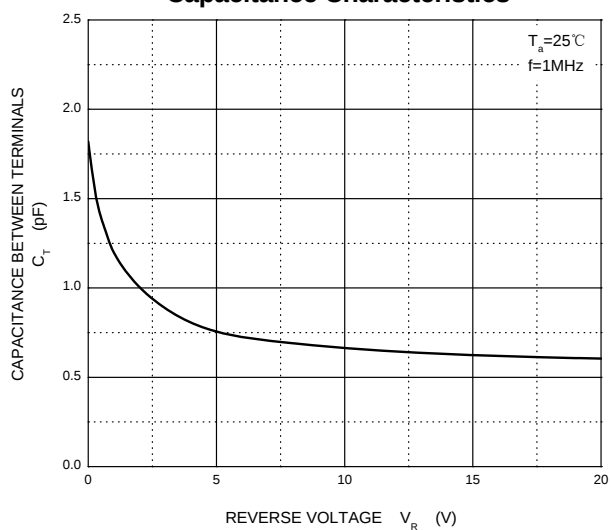
Forward Characteristics



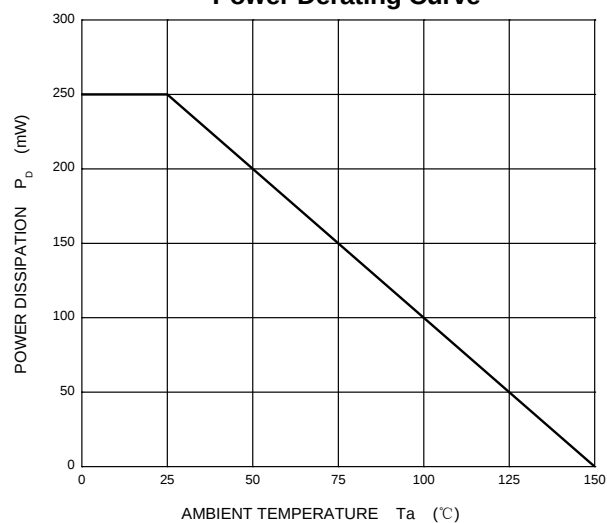
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

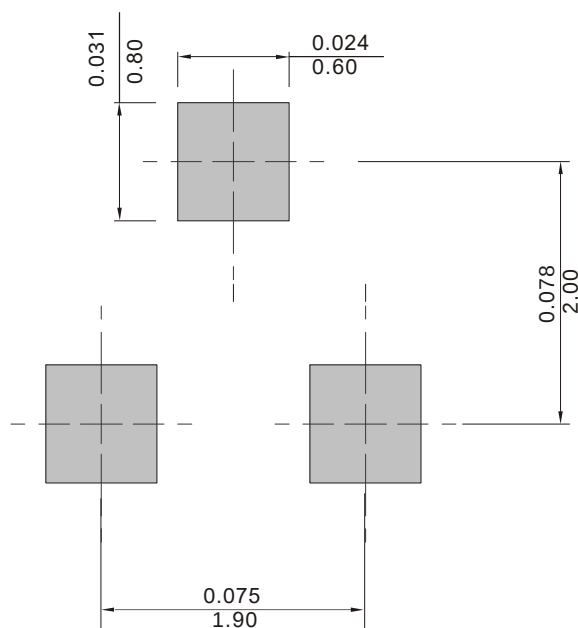


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MOUNTING PAD LAYOUT

SOT-23

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BAV170	SOT-23	7 Inch	3000