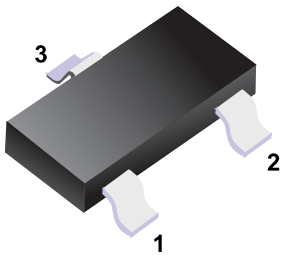
● Plastic-Encapsulate Diodes

BAV170



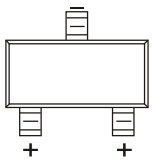
FEATURES

- Low Leakage Current
- High Switching Speed

APPLICATION

- Low-leakage Current Applications

MARKING:JXW



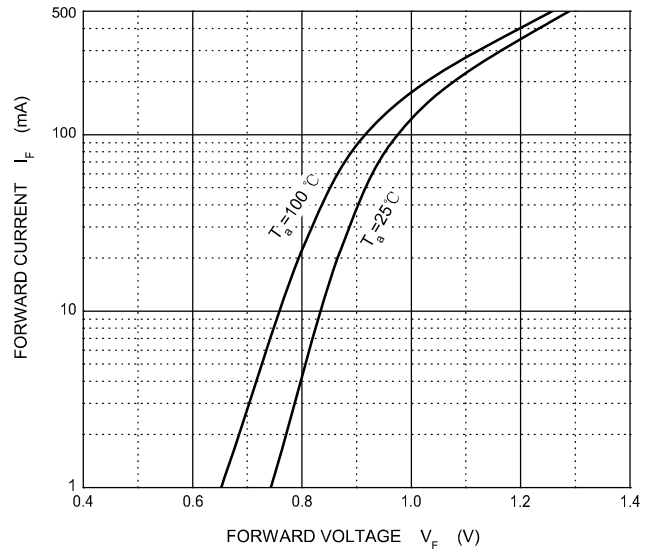
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	85	V
V_R	DC Blocking Voltage	75	V
I_F	Forward Current(single diode)	215	mA
	Forward Current(double diode)	125	
I_{FRM}	Repetitive Peak Forward Current	500	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@ t =8.3ms	1.0	A
P_D	Power Dissipation	250	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	500	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

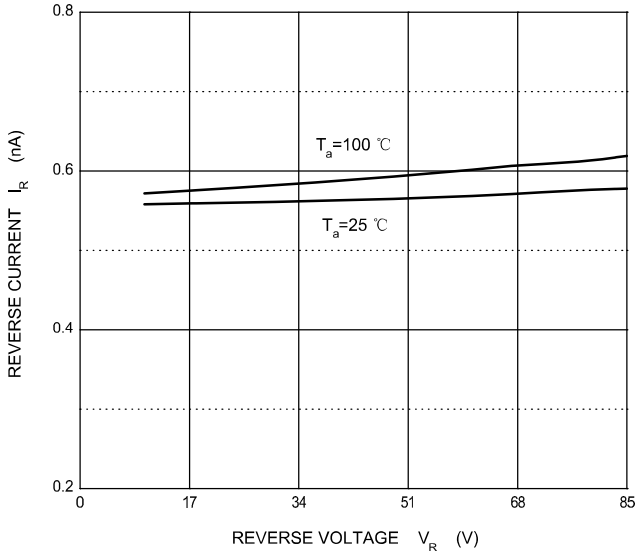
ELECTRICAL CHARACTERISTICS(T_a=25℃unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=100μA	75			V
Reverse current	I_R	V_R=75V			5	nA
Forward voltage	V_F	I_F=1mA			0.9	V
		I_F=10mA			1	
		I_F=50mA			1.1	
		I_F=150mA			1.25	
Total capacitance	C_{tot}	V_R=0,f=1MHz		2		pF
Reverse recovery time	t_{rr}	I_F= I_R=10mA, I_{rr}=0.1×I_R, R_L=100Ω			3	μs

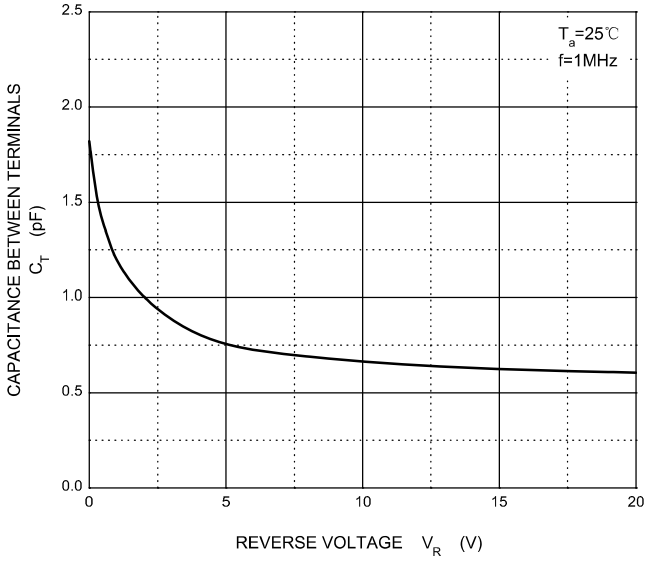
Forward Characteristics



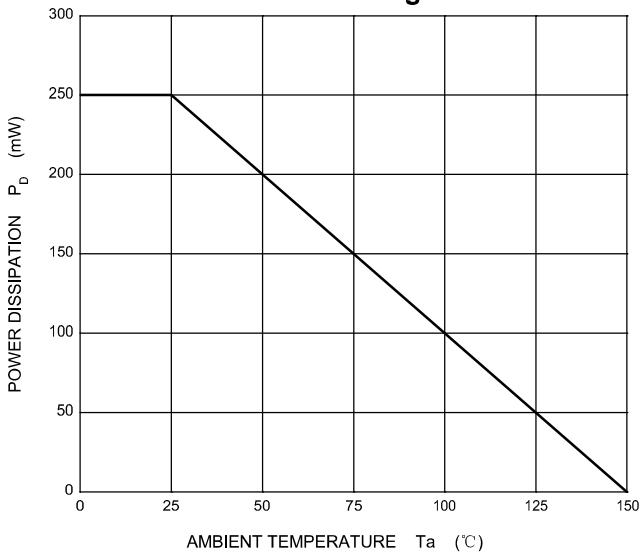
Reverse Characteristics



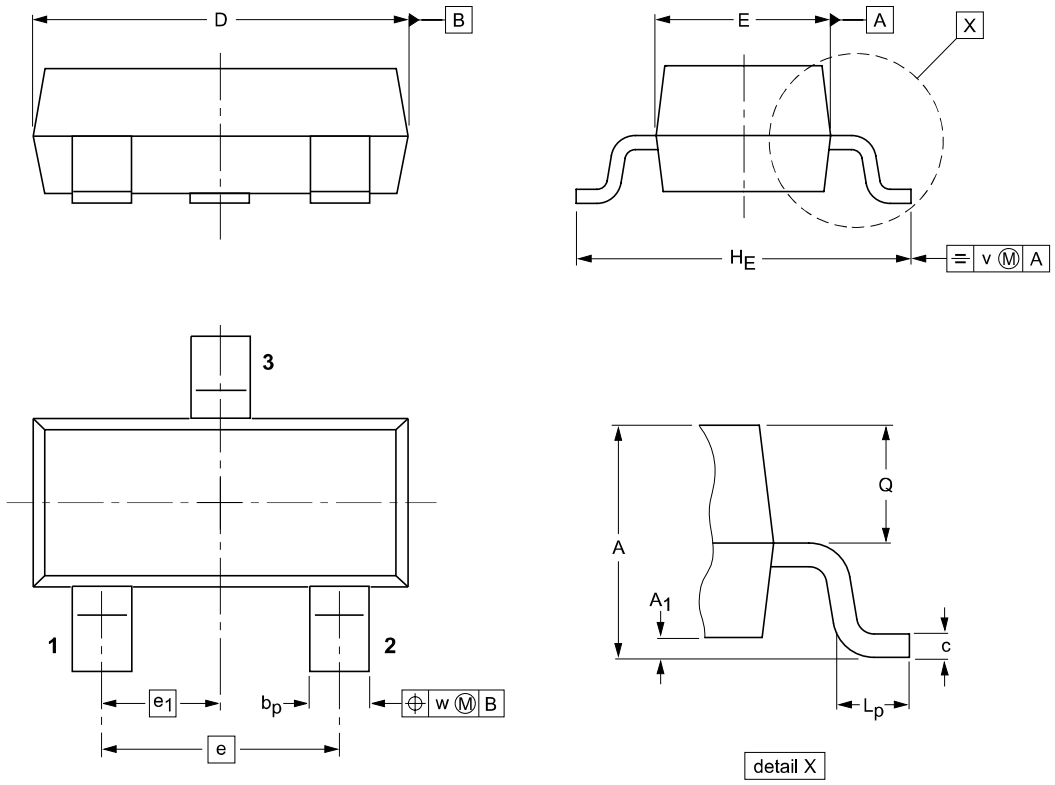
Capacitance Characteristics



Power Derating Curve



Package Outline SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A_1 max.	b_p	c	D	E	e	e_1	H_E	L_p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel,7”reel	3000	EIA-481-1