

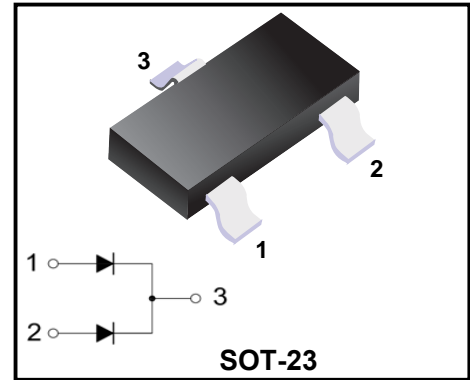
● **Plastic-Encapsulate Diodes**

**Features**

- Low Leakage Current
- High Switching Speed

**APPLICATION**

- Low-leakage Current Applications



**Marking Code**

BAV170	JXW
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**Absolute Maximum Ratings (Ta=25°C)**

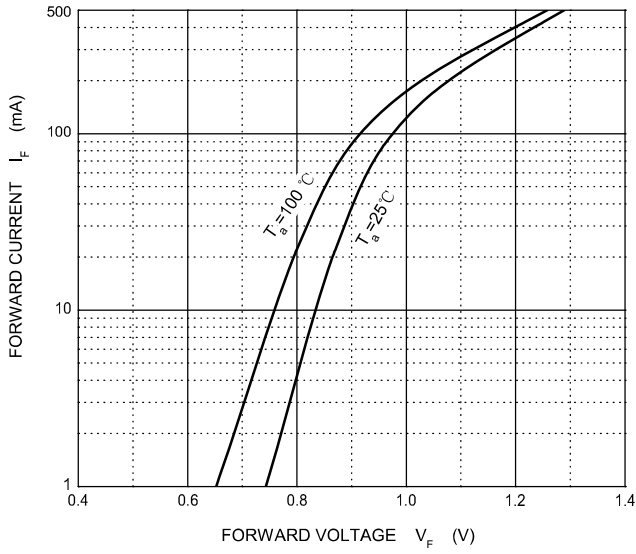
Symbol	Parameter	Value	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage	85	V
$V_R$	DC Blocking Voltage	75	V
$I_F$	Forward Current(single diode )	215	mA
	Forward Current(double diode )	125	
$I_{FRM}$	Repetitive Peak Forward Current	500	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current@ t =8.3ms	1.0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

**Electrical Characteristics (Ta=25°C Unless otherwise noted )**

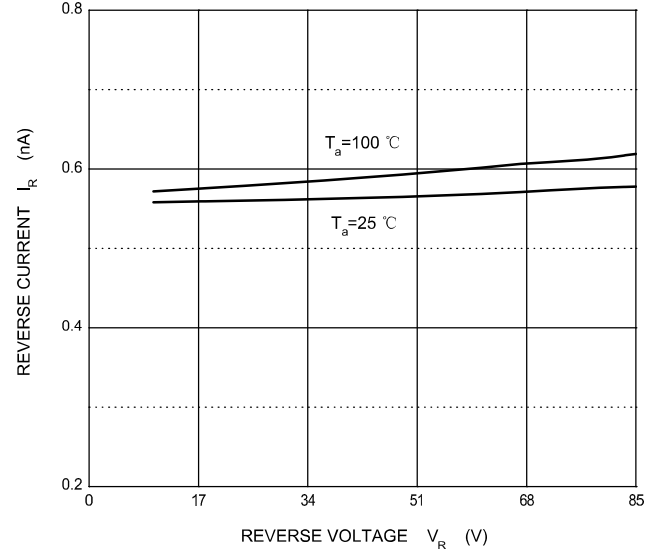
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu A$	75			V
Reverse current	$I_R$	$V_R=75V$			5	nA
Forward voltage	$V_F$	$I_F=1mA$			0.9	V
		$I_F=10mA$			1	
		$I_F=50mA$			1.1	
		$I_F=150mA$			1.25	
Total capacitance	$C_{tot}$	$V_R=0, f=1MHz$		2		pF
Reverse recovery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

Typical Characteristic

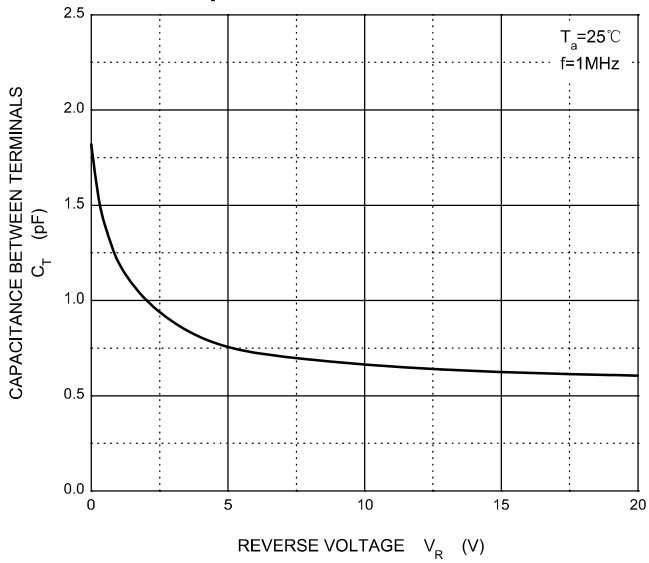
**Forward Characteristics**



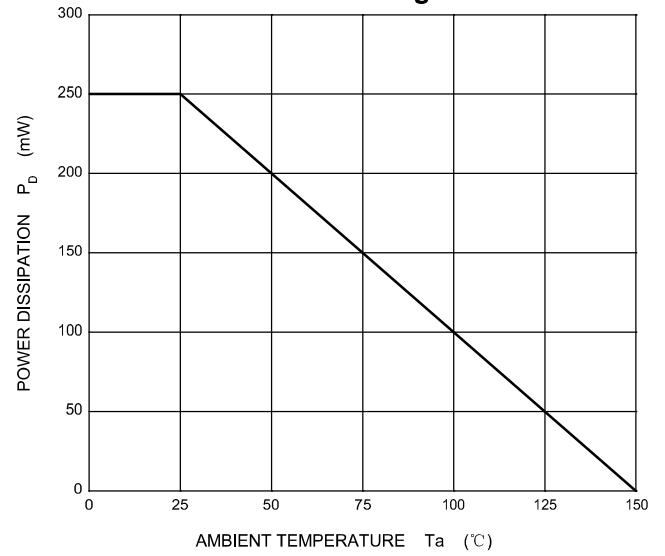
**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**



**Ordering information**

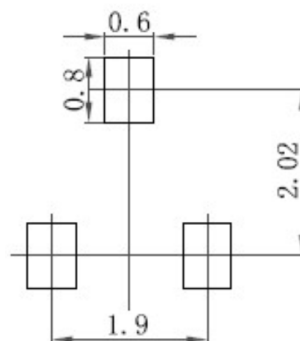
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

**Package Dimensions**

**SOT-23**

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

**The recommended mounting pad size**



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