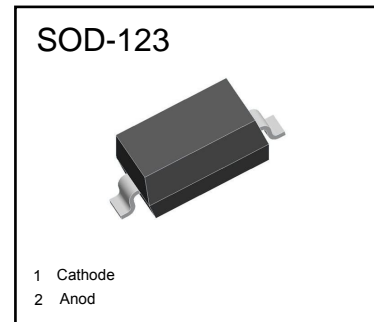




### BAV19W-BAV21W

#### Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion



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

Parameter		Symbol	Value	Unit
Repetitive Peak Reverse Voltage	BAV19W	$V_{RRM}$	120	V
	BAV20W		200	
	BAV21W		250	
Reverse Voltage	BAV19W	$V_R$	100	V
	BAV20W		150	
	BAV21W		200	
Average Rectified Forward Current		$I_{F(AV)}$	200	mA
Forward Continuous Current		$I_{FM}$	400	mA
Repetitive Peak Forward Current		$I_{FRM}$	625	mA
Non-repetitive Peak Forward Surge Current	at $t = 1\text{ ms}$ at $t = 1\text{ s}$	$I_{FSM}$	2.5	A
			0.5	
Power Dissipation		$P_d$	250	mW
Operating and Storage Temperature Range		$T_j, T_{stg}$	- 65 to + 150	$^\circ\text{C}$

#### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter		Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$		$V_F$	-	1	V
			-	1.25	
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	BAV19W	$V_{(BR)R}$	120	-	V
	BAV20W		200	-	
	BAV21W		250	-	
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$	BAV19W	$I_R$	-	100	nA
	BAV20W		-	100	
	BAV21W		-	100	
Total Capacitance at $V_R = 0, f = 1\text{ MHz}$		$C_T$	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, I_{rr} = 0.1I_R, R_L = 100\text{ }\Omega$		$t_{rr}$	-	50	ns



### Typical Characteristics

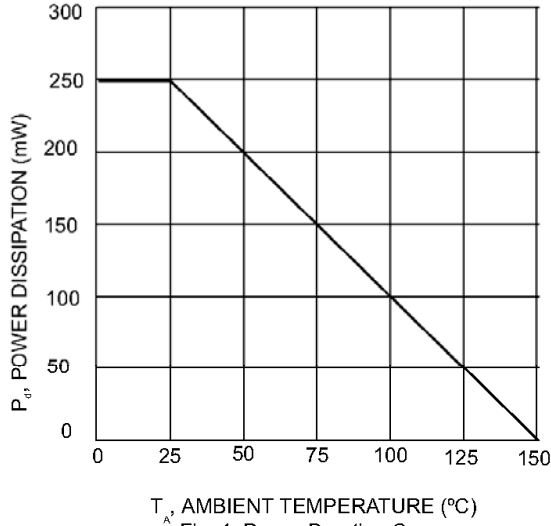


Fig. 1 Power Derating Curve

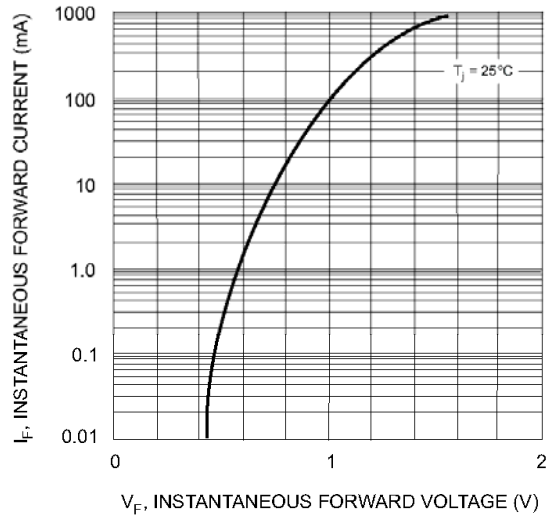


Fig. 2 Typical Forward Characteristics

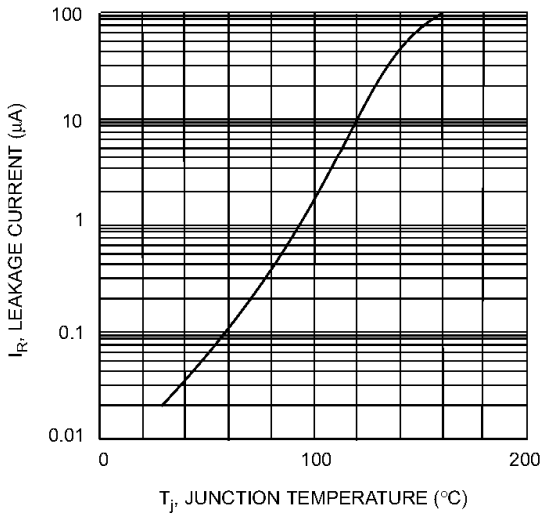


Fig. 3 Leakage Current vs Junction Temperature

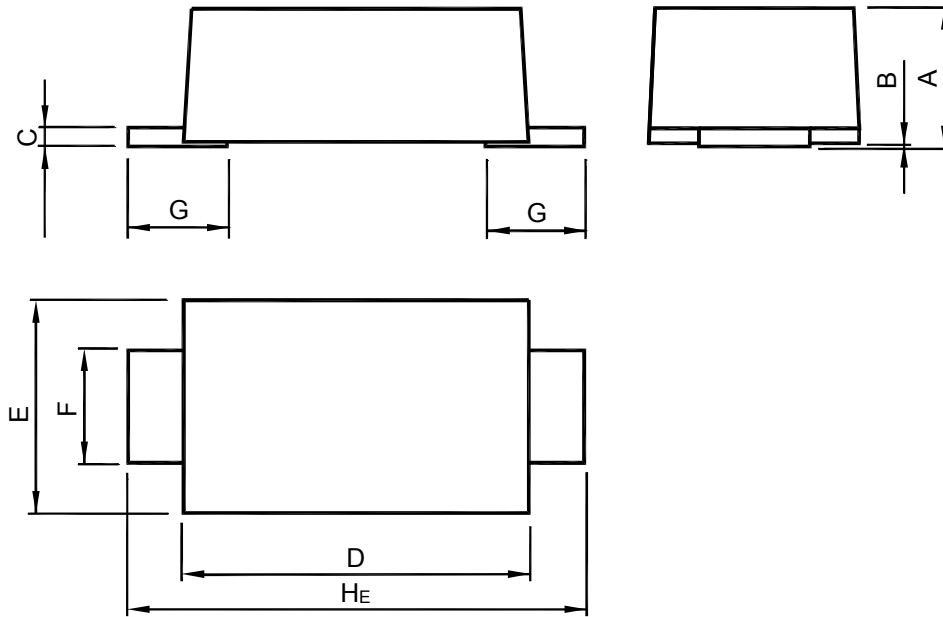




Package Dimension

SOD-123

Unit: mm



UNIT	A	B	C	D	E	F	G	H <sub>E</sub>
mm	1.08	0.1	0.2	2.9	1.9	1.1	0.9	3.9
	0.88	0	0.1	2.6	1.7	0.8	0.7	3.5

