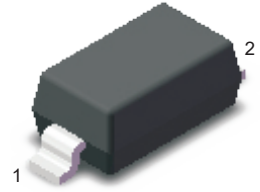


Features

- Fast switching speed
- Glass passivated chip junction
- Surface mount package ideally suited for automatic insertion

SOD-123



1.Cathode —|<— 2.Anode

Marking Code:

BAV19W: A8

BAV20W: T2

BAV21W: T3

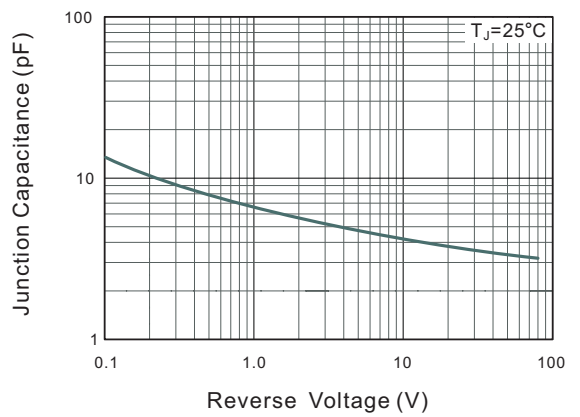
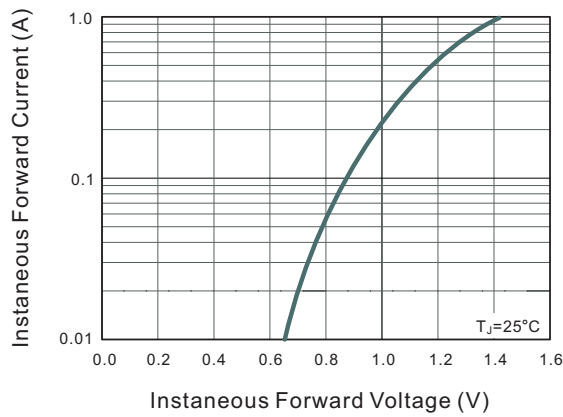
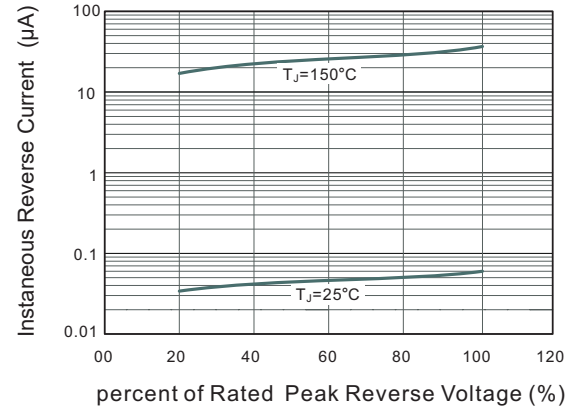
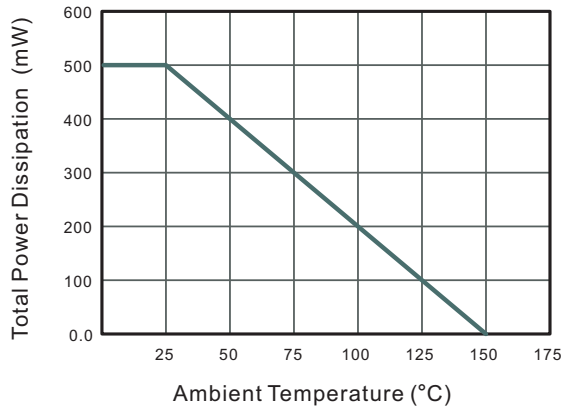
Absolute Maximum Ratings at $T_A = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	120	V
		200	
		250	
Maximum RMS Voltage	V_{RMS}	100	V
		150	
		200	
Continuous Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	1	A
at $t = 1\text{ s}$		3	
at $t = 1\text{ ms}$		9	
at $t = 1\text{ }\mu\text{s}$			
Power Dissipation	P_D	500	mW
Junction Temperature	T_J	500	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

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

Parameter		Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	BAV19W	$V_{(BR)R}$	120	--	V
at $I_R = 100\text{ }\mu\text{A}$	BAV20W		200	--	
	BAV21W		250	--	
Maximum Forward Voltage		V_F			V
at $I_F = 100\text{ mA}$			--	1	
at $I_F = 200\text{ mA}$			--	1.25	
Maximum DC Reverse Current at Rated DC Blocking Voltage		I_R			μA
at $T_A = 25\text{ }^{\circ}\text{C}$			--	0.1	
at $T_A = 150\text{ }^{\circ}\text{C}$			--	100	
Typical Junction Capacitance		C_j			pF
at $V_R = 4\text{ V}$, $f = 1\text{ MHz}$			--	5	
Maximum Reverse Recovery Time		T_{rr}			nS
at $I_F = 0.5\text{ A}$, $I_{rr} = 0.25\text{ A}$, $I_R = 1\text{ A}$			--	50	

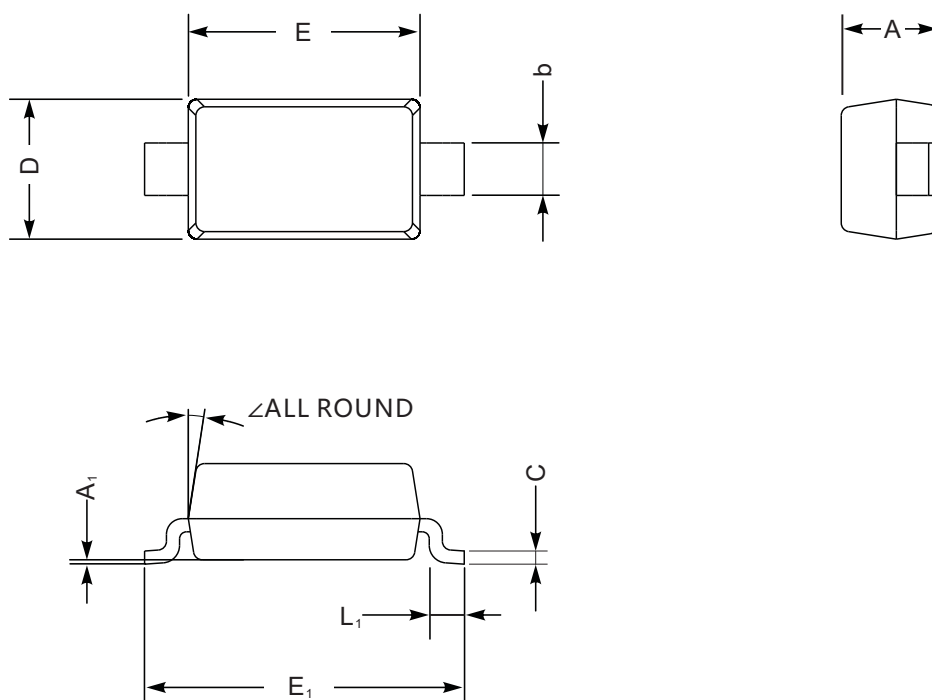
Typical Characteristic Curves



Package Outline

SOD-123

Dimensions in mm



UNIT		A	C	D	E	E ₁	L ₁	b	A ₁	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	