



BAV21WS

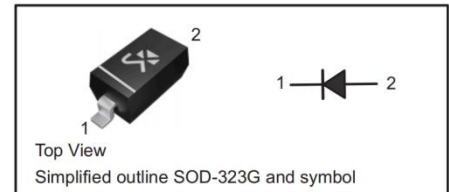
Features

- For surface mounted applications
- Glass passivated chip junction
- Fast reverse recovery time
- Ideal for automated placement

Marking:T3

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter		Symbol	Value	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	250	V
Maximum RMS Voltage		V_{RMS}	141	V
Continuous Forward Current		I_F	250	mA
Repetitive Peak Forward Current		I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current	at 1s	I_{FSM}	1	A
	at 1ms		3	
	at 1 μ s		9	
Total Power Dissipation		P_{tot}	500	mW
Operating and Storage Temperature Range		T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$

Thermal Characteristics

Parameter	Symbol	Value	Units
Thermal Resistance,Junction to Ambient	$R_{\theta JA}$	170	$^{\circ}\text{C}/\text{W}$
Thermal Resistance,Junction to Case	$R_{\theta JC}$	80	$^{\circ}\text{C}/\text{W}$

Note:P.C.B. mounted with 0.3"x0.3"(8x8mm)copper pad areas

Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter		Symbol	Value	Units
Reverse Breakdown Voltage at $I_R = 100\mu\text{A}$		$V_{(BR)R}$	250	V
Maximum Forward Voltage	at 100mA	V_F	1.00	V
	at 200mA		1.25	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}\text{C}$	I_R	0.1	nA
	$T_A=150^{\circ}\text{C}$		100	μA
Total Junction Capacitance at $V_R = 4\text{V}$, $f = 1\text{MHz}$		C_J	5	pF
Reverse Recovery Time ⁽¹⁾		t_{rr}	50	ns

Note:(1)Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$



Typical Characteristic

Fig.1 Power Derating Curve

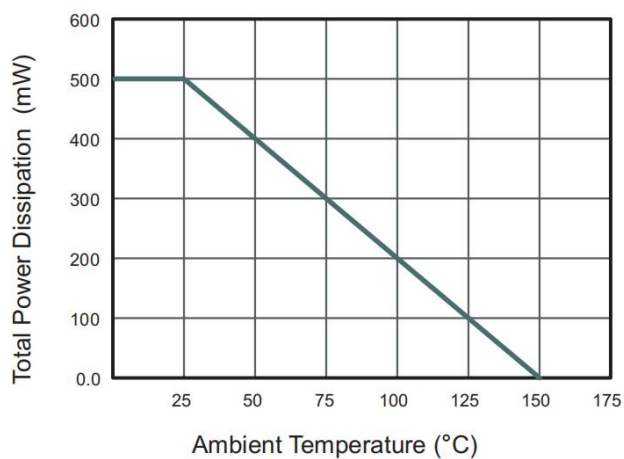


Fig.2 Typical Reverse Characteristics

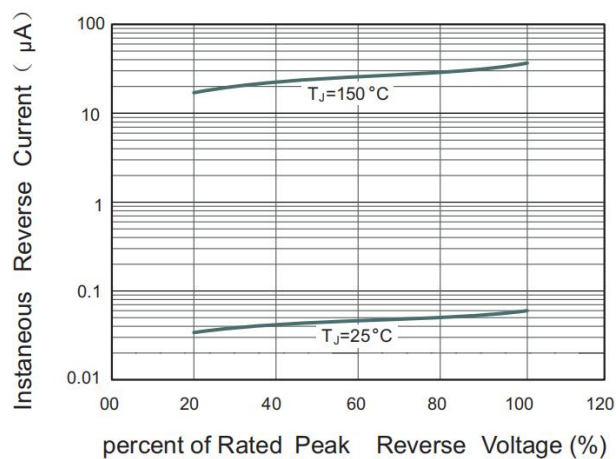


Fig.3 Typical Instantaneous Forward Characteristics

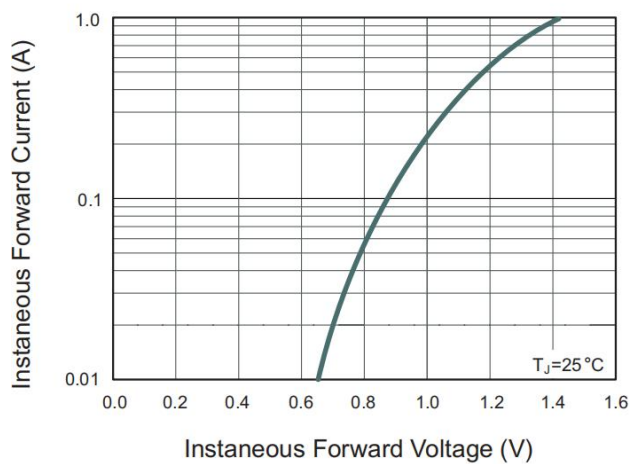
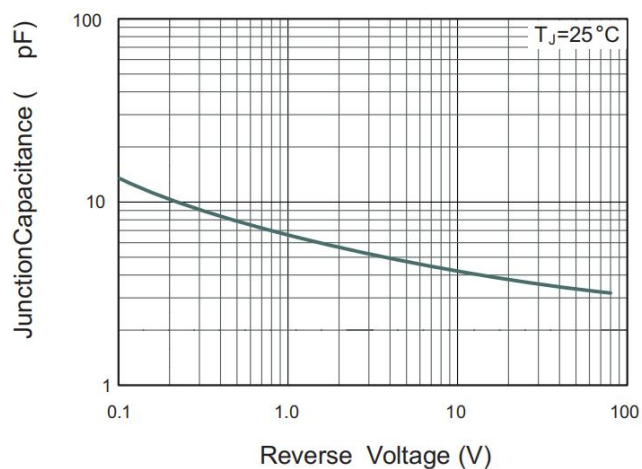


Fig.4 Typical Junction Capacitance

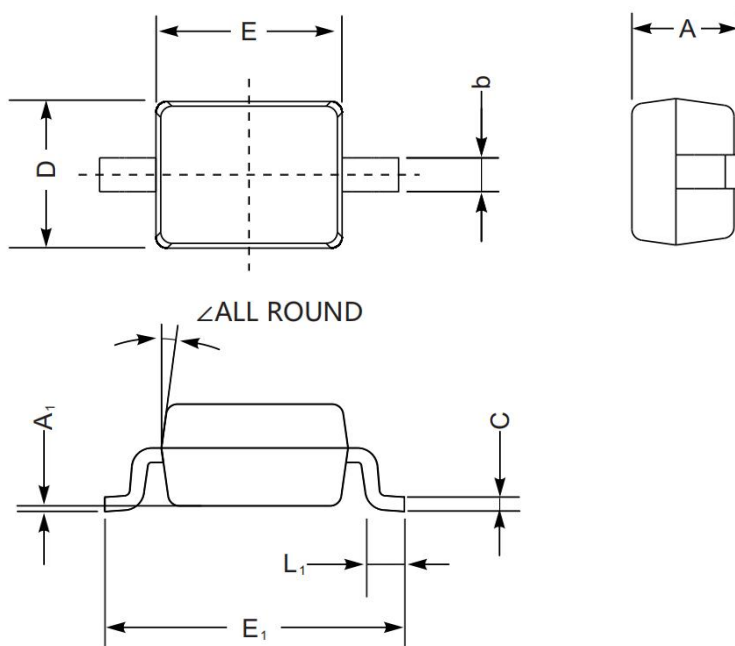




Package Information

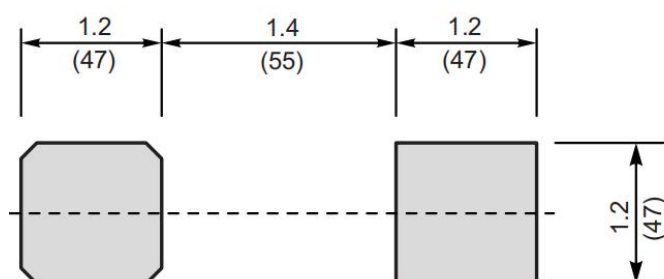
SOD-323G

Dimensions in mm

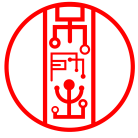


Unit		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	-	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	-	

The recommended mounting pad size



Unit: $\frac{\text{mm}}{(\text{mil})}$



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