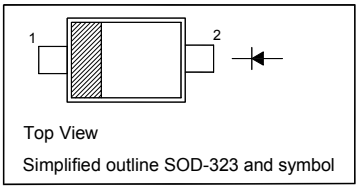
High Voltage Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Simplified outline SOD-323 and symbol

Features

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

Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit
Repetitive Peak Reverse Voltage	BAV19WS BAV20WS BAV21WS	V_{RRM}	120 200 250	V
Reverse Voltage	BAV19WS BAV20WS BAV21WS	V_R	100 150 200	V
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 µs at t = 1 s	I_{FSM}	2.5 0.5	A
Power Dissipation		P_{tot}	200	mW
Operating and Storage Temperature Range		T_j, T_{stg}	- 65 to + 150	°C

Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	BAV19WS BAV20WS BAV21WS	$V_{(BR)R}$	120 200 250	- - -	V
Reverse Current at V_R = 100 V at V_R = 150 V at V_R = 200 V	BAV19WS BAV20WS BAV21WS	I_R	- - -	100 100 100	nA
Forward Voltage at I_F = 100 mA at I_F = 200 mA		V_F	- -	1 1.25	V
Total Capacitance at V_R = 0, f = 1 MHz		C_T	-	5	pF
Reverse Recovery Time at I_F = I_R = 30 mA, I_{RR} = 0.1 X I_R, R_L = 100 Ω		t_{rr}	-	50	ns

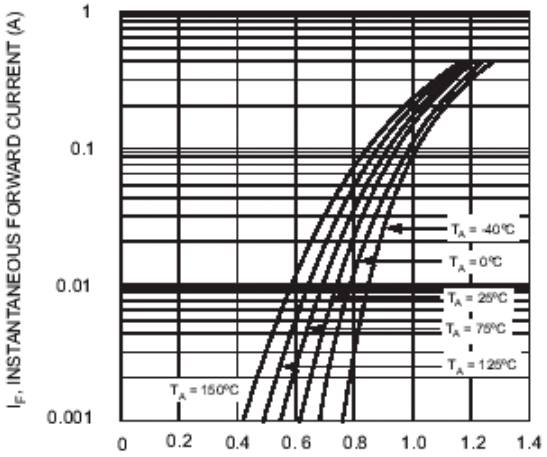


Fig. 1 Typical Forward Characteristics

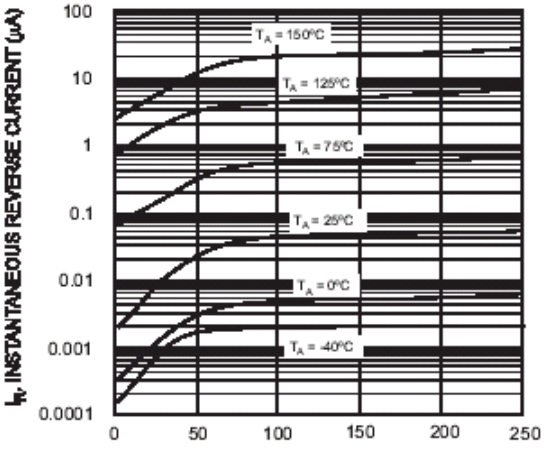


Fig. 2 Typical Reverse Characteristics

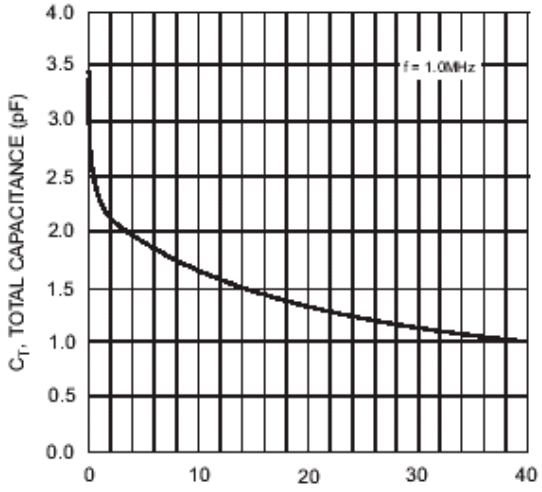


Fig. 3 Typical Capacitance vs. Reverse Voltage

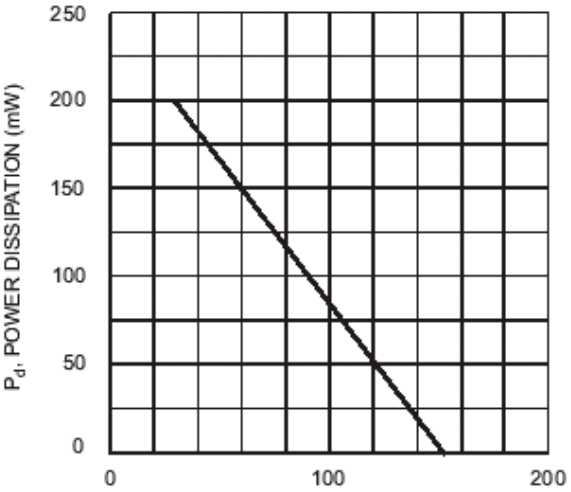
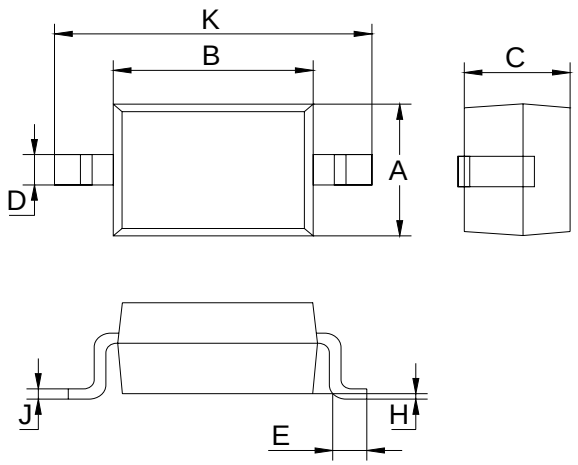


Fig. 4 Power Derating Curve, Total Package

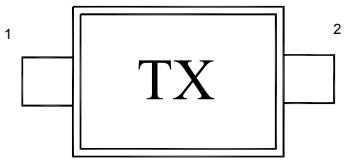
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



SOD-323		
Dim	Min	Max
A	1.275	1.325
B	1.675	1.725
C	0.9 Typical	
D	0.25	0.35
E	0.27	0.37
H	0.02	0.1
J	0.1 Typical	
K	2.6	2.7
All Dimensions in mm		

Marking: TX



Note:

(1) "T" is part number fixed

(2) "X" : For model BAV19WS, the value is 1;
For model BAV20WS, the value is 2;
For model BAV21WS, the value is 3;