

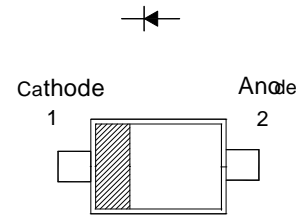


BAV19WT/BAV20WT/BAV21WT

High Voltage Switching Diode

Features

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



SOD-523

TYPE	BAV19WT	BAV20WT	BAV21WT
MARKING	A8	T2	T3

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit	
Repetitive Peak Reverse Voltage	V _{RRM}	120	V	
		200		
		250		
Reverse Voltage	V _R	100	V	
		150		
		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	I _{FSM}	at t = 1 μs	2.5	A
		at t = 1 s	0.5	
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	V _{(BR)R}	120	-	V
		200	-	
		250	-	
Reverse Current at V _R = 100 V at V _R = 150 V at V _R = 200 V	I _R	-	100	nA
		-	100	
		-	100	
Forward Voltage at I _F = 100 mA at I _F = 200 mA	V _F	-	1	V
		-	1.25	
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

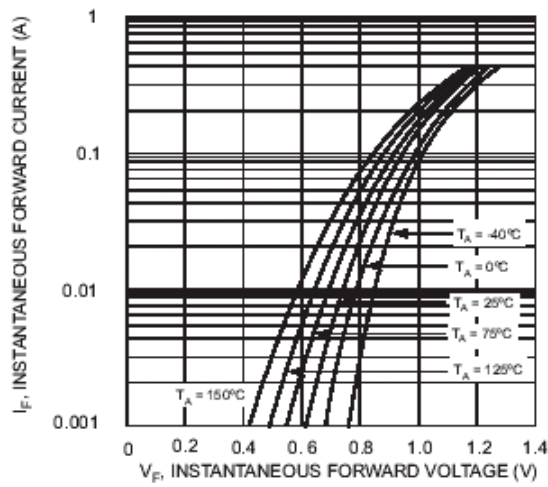


Fig. 1 Typical Forward Characteristics

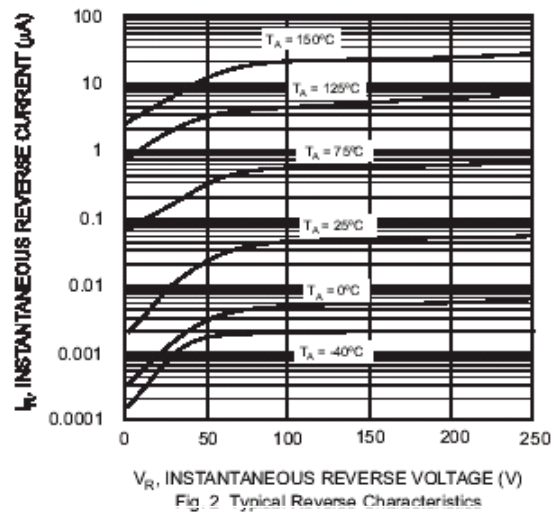


Fig. 2 Typical Reverse Characteristics

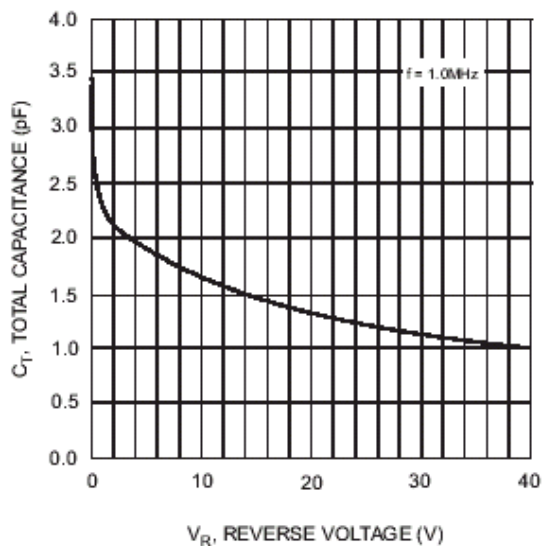


Fig. 3 Typical Capacitance vs. Reverse Voltage

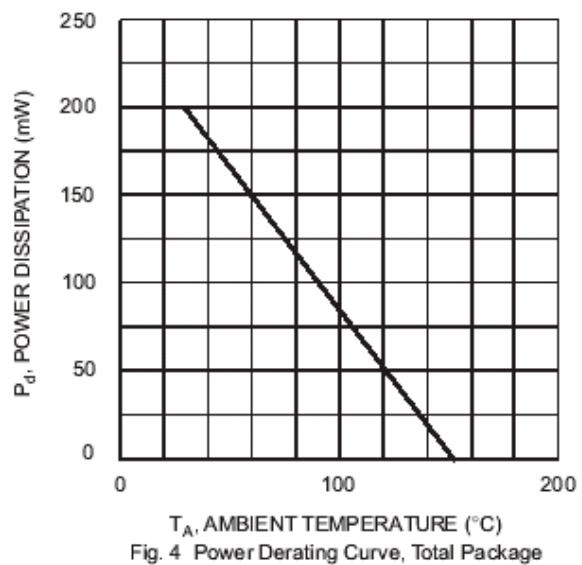


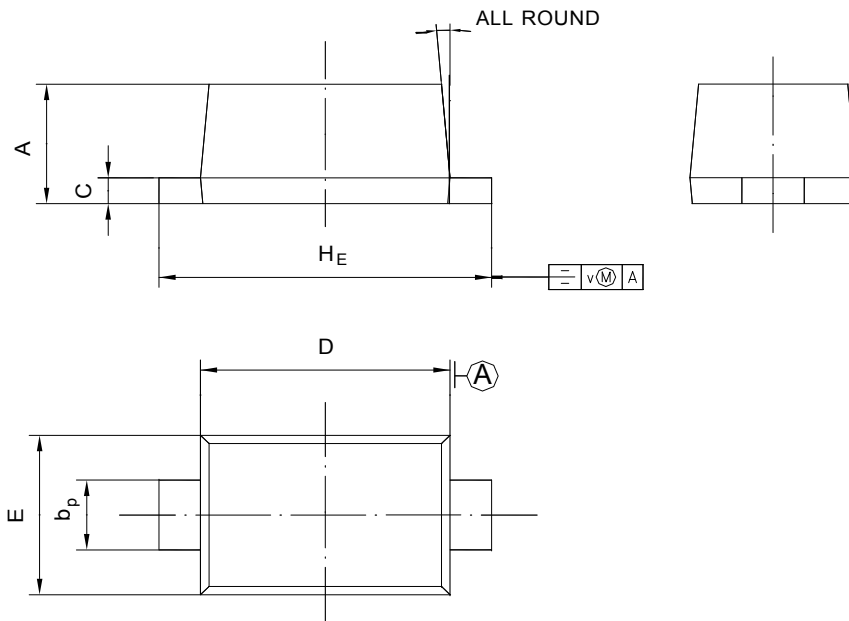
Fig. 4 Power Derating Curve, Total Package



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.68 0.58	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°