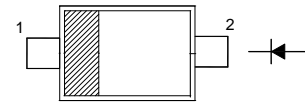


Silicon Epitaxial Planar Diodes

High Voltage Switching Diode

Features

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



Top View

1 Cathode 2 Anode

Simplified outline SOD-523 and symbol

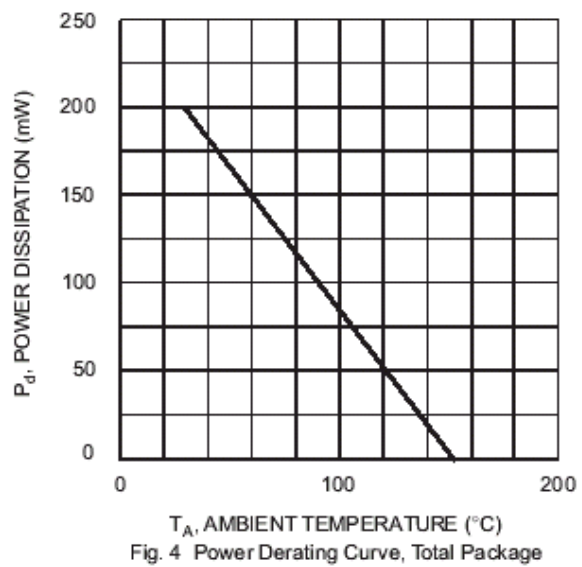
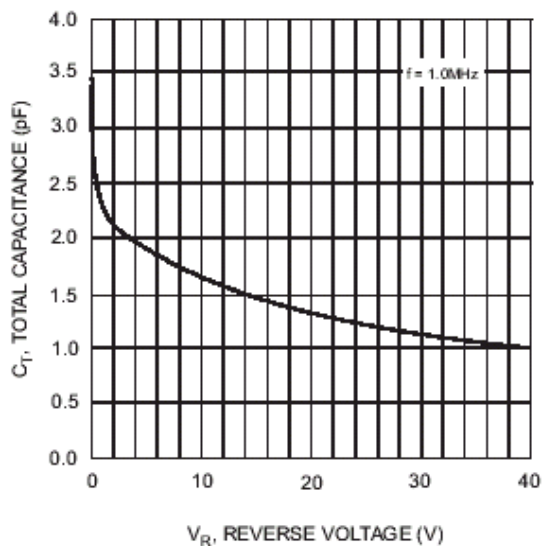
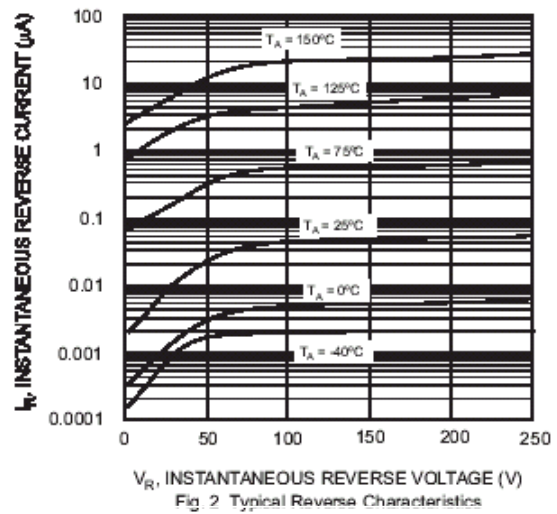
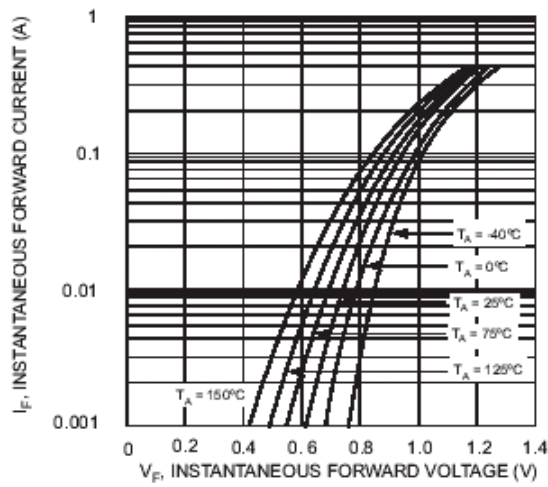
TYPE	BAV19WT	BAV20WT	BAV21WT
MARKING	A8	T2	T3

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

Parameter	Symbol	Value	Unit	
Repetitive Peak Reverse Voltage	BAV19WT BAV20WT BAV21WT	V_{RRM}	120 200 250	V
Reverse Voltage	BAV19WT BAV20WT BAV21WT	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 $t = 1\text{ }\mu\text{s}$ at $t = 1\text{ s}$	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	$^\circ\text{C}$

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

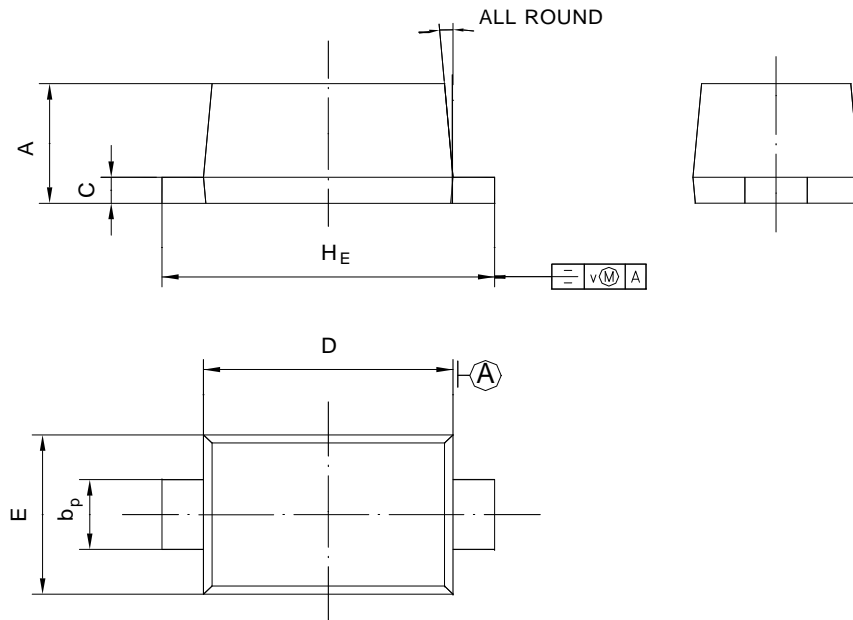
Parameter	Symbol	Min.	Max.	Unit	
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	BAV19WT BAV20WT BAV21WT	$V_{(BR)R}$	120 200 250	- - -	V
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$	BAV19WT BAV20WT BAV21WT	I_R	- - -	100 100 100	nA
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$		V_F	- -	1 1.25	V
Total Capacitance at $V_R = 0, f = 1\text{ MHz}$		C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, I_{RR} = 0.1 \times I_R, R_L = 100\text{ }\Omega$		t_{rr}	-	50	ns



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°