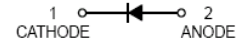




### FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited For Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



SOD-323

### APPLICATIONS

- Surface mount fast switching diode

### ORDERING INFORMATION

Type No.	Marking	Package Code
BAV19WS	A8	SOD-323
BAV20WS	T2	SOD-323

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	BAV19WS	BAV20WS	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	120	200	V
Working Peak Reverse Voltage	$V_{RWM}$	100	150	V
DC Reverse Voltage	$V_R$			
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	V
Average Rectified Output Current	$I_o$	200		mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	@t=1.0 $\mu$ s	2.5	A
		@t=1.0 s	0.5	
Repetitive Peak Forward Surge Current	$I_{FRM}$	625		mA
Power Dissipation	$P_d$	200		mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625		°C/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150		°C



ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage BAV19WS BAV20WS	$V_{(BR)R}$	120 200		V	$I_R=100\mu A$
Forward Voltage	$V_{FM}$	-	1.0 1.25	V	$I_F=100mA$ $I_F=200mA$
Reverse Current BAV19WS BAV20WS	$I_R$	-	0.1 0.1	$\mu A$	$V_R=100V$ $V_R=150V$
Capacitance between terminals	$C_T$	-	5	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	50	ns	$I_F=I_R=30mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

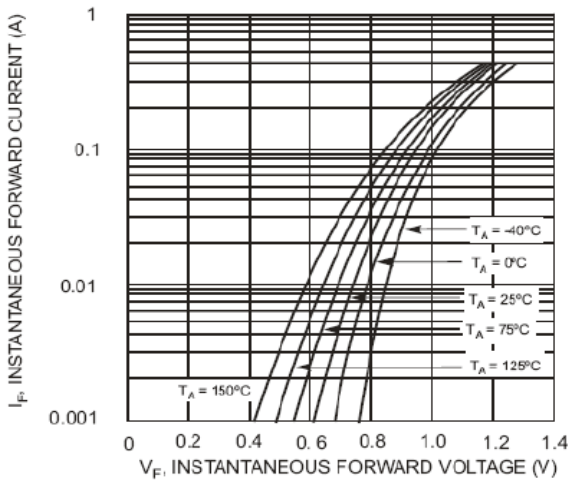


Fig. 1 Typical Forward Characteristics

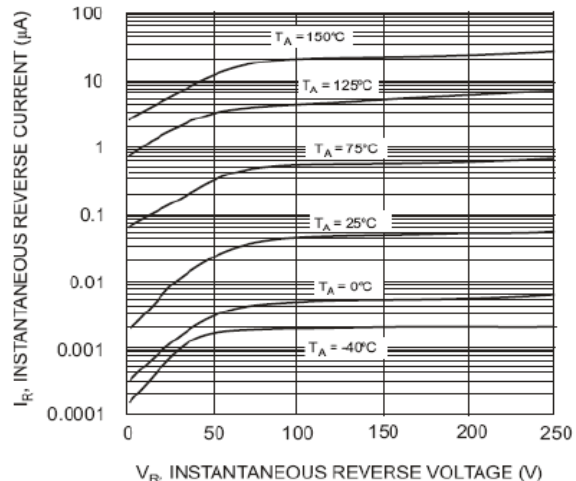


Fig. 2 Typical Reverse Characteristics

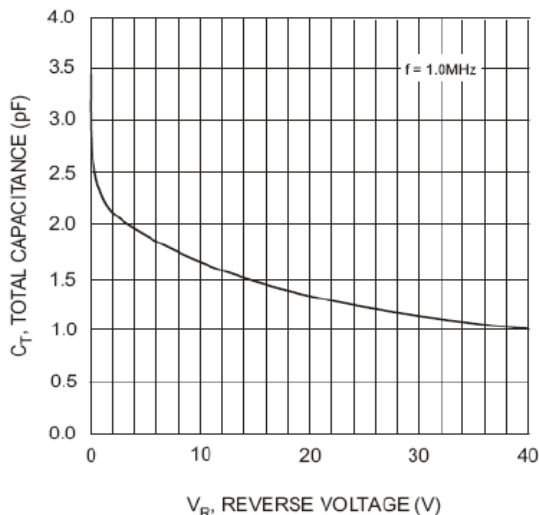


Fig. 3 Typical Capacitance vs. Reverse Voltage

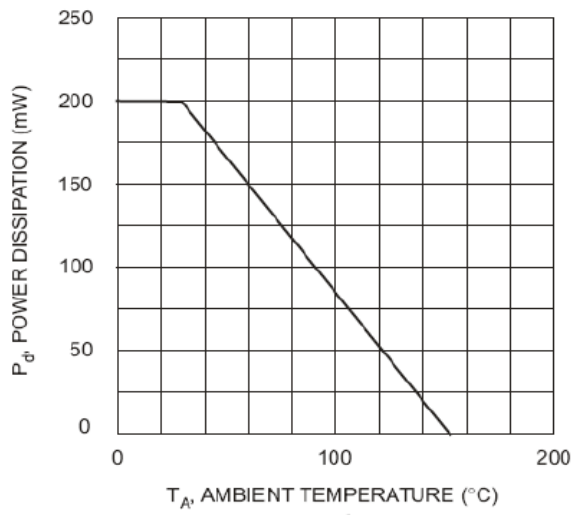
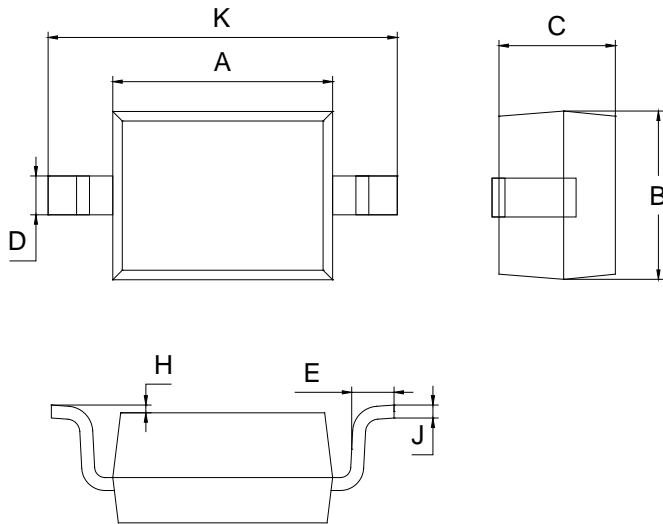


Fig. 4 Power Derating Curve, Total Package



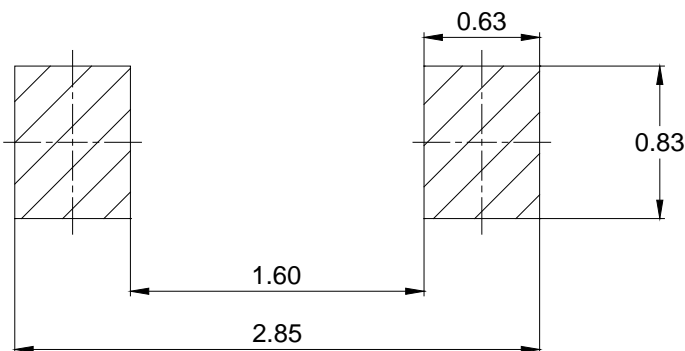
## PACKAGE OUTLINE

Plastic surface mounted package



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

## SOLDERING FOOTPRINT



Unit: mm

## PACKAGE INFORMATION

Device	Package	Shipping
BAV19WS/20WS	SOD-323	3000 pcs / Tape & Reel