

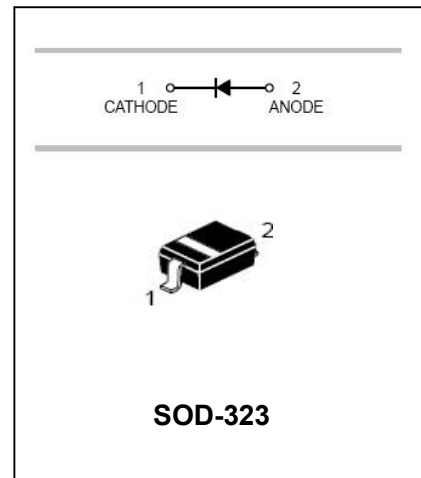
# Silicon Epitaxial Planar Diode

# BAV21WS

## FEATURES

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

**HF**



## APPLICATIONS

- Surface mount fast switching diode.

## ORDERING INFORMATION

Type No.	Marking	Package Code
BAV21WS	T3	SOD-323

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

Characteristic	Symbol	BAV21WS	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	250	V
Working Peak Reverse Voltage DC Reverse Voltage	$V_{RWM}$ $V_R$	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	141	V
Average Rectified Output Current	$I_o$	200	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 ms @t=1.0 s	$I_{FSM}$	2.5 0.5	A
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
Thermal Resistance Junction to Case	$R_{\theta JC}$	250	°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	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu A$	250	-	V
Forward Voltage	$V_{FM}$	$I_F=100mA$ $I_F=200mA$	-	1.0 1.25	V
Reverse Current	$I_R$	$V_R=200V$ $V_R=200V, T_J=125^\circ C$	-	0.1 20	$\mu A$
Capacitance between terminals	$C_T$	$V_R=0, f=1.0MHz$	-	5	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=30mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$	-	50	ns

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

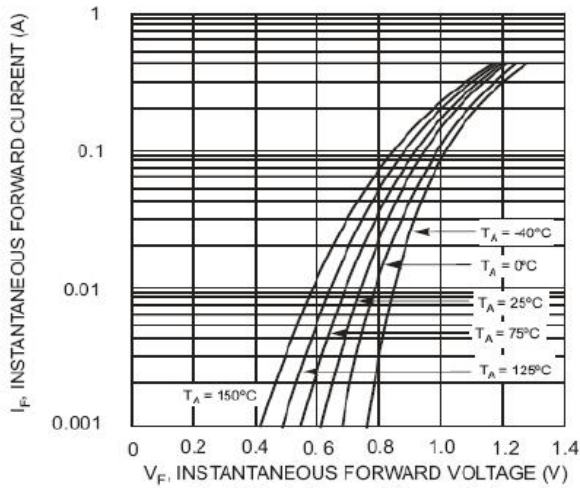


Fig. 1 Typical Forward Characteristics

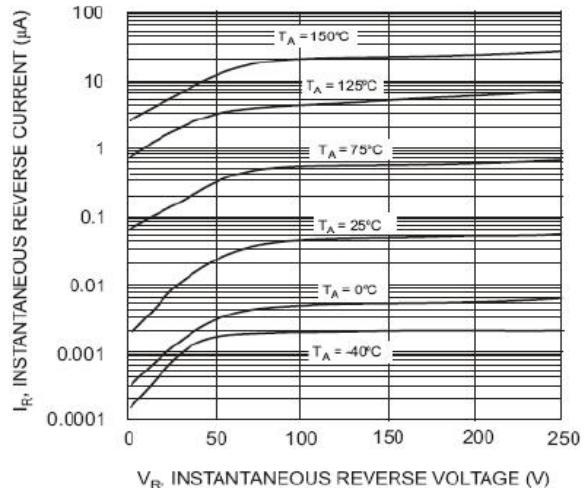


Fig. 2 Typical Reverse Characteristics

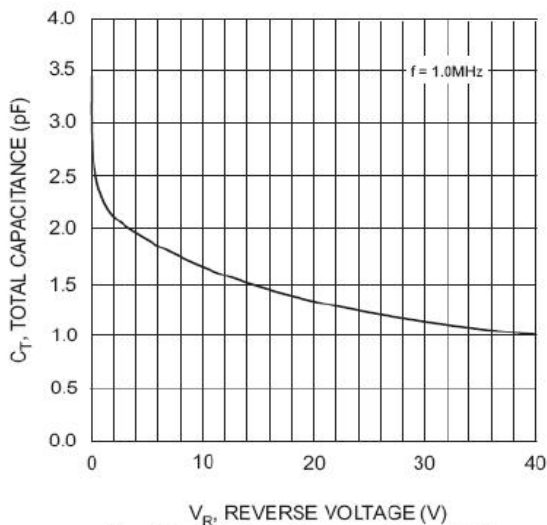


Fig. 3 Typical Capacitance vs. Reverse Voltage

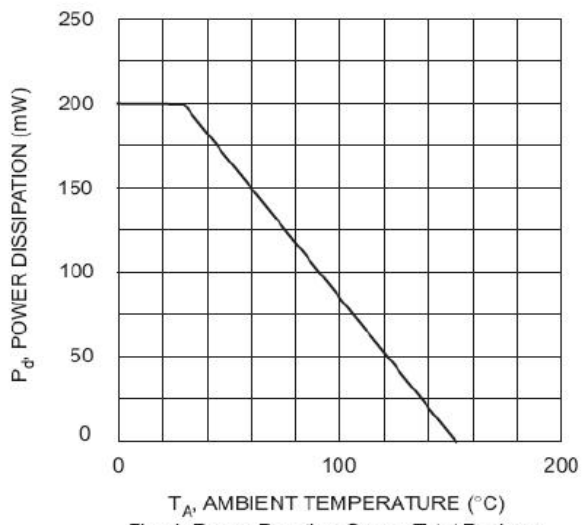
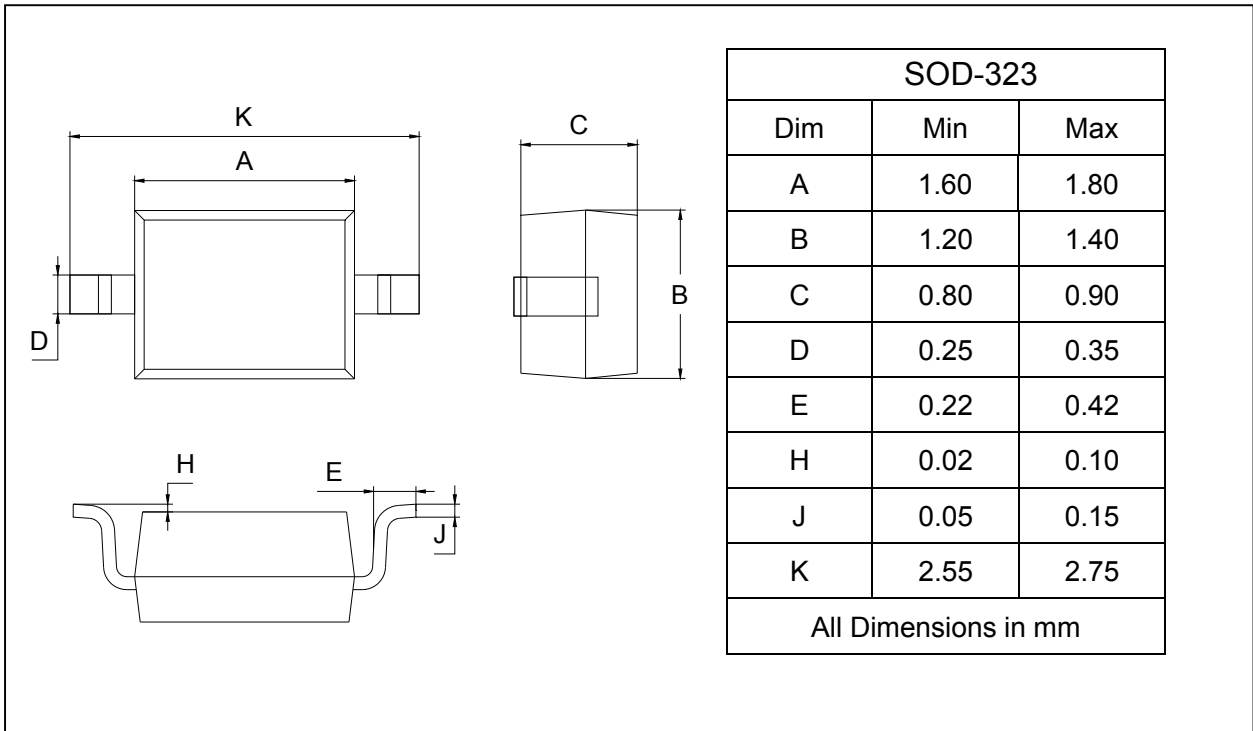


Fig. 4 Power Derating Curve, Total Package

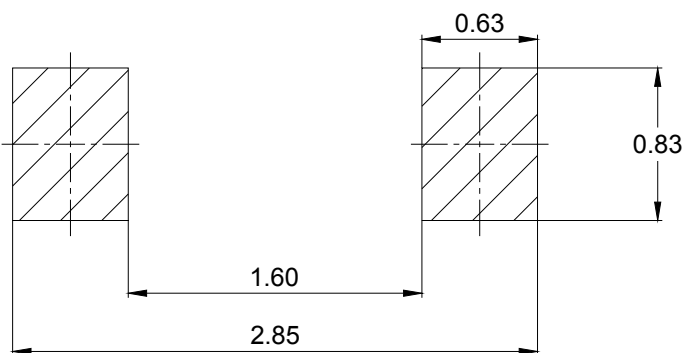
**PACKAGE OUTLINE**

Plastic surface mounted package

SOD-323



**SOLDERING FOOTPRINT**



Unit : mm

**PACKAGE INFORMATION**

Device	Package	Shipping
BAV21WS	SOD-323	3000pcs / Tape & Reel