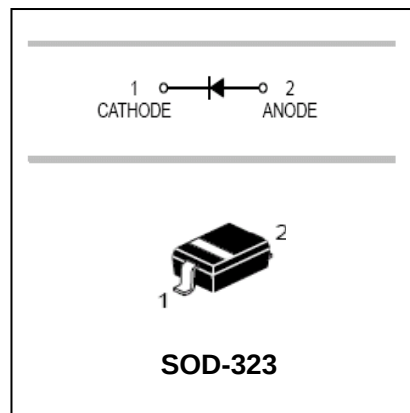


Surface Mount Low Leakage Diode

BAV3004WS

FEATURES

- Surface Mount Package Ideally Suited for Automated Insertion
- Low Leakage Current
- Fast Switching Speed
- High Reverse Breakdown Voltage



ORDERING INFORMATION

Type No.	Marking	Package Code
BAV3004WS	4P	SOD-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Repetitive Peak reverse voltage	V_{RRM}	350	V
Working Peak Reverse Voltage DC Blocking Voltage	V_{RWM} V_R	300	V
RMS Reverse Voltage	$V_{R(RMS)}$	212	V
Forward Continuous Current	I_{FM}	225	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-Repetitive Peak Forward Surge current @t=1.0 μ s @t=1.0s	I_{FSM}	4.0 1.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	R_{JA}	625	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	°C



Surface Mount Low Leakage Diode

BAV3004WS

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	350			V	$I_R=150\text{ }\mu\text{A}$
Forward Voltage	V_F		0.78 0.93 1.03	0.87 1.0 1.25	V	$I_F=20\text{mA}$ $I_F=100\text{mA}$ $I_F=200\text{mA}$
Reverse Current	I_R		30 35	100 100	nA μA	$V_R=240\text{V}, T_J=25^\circ\text{C}$ $V_R=240\text{V}, T_J=125^\circ\text{C}$
Total Capacitance	C_T		1.0	5.0	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	t_{rr}			50	ns	$I_F=I_R=30\text{mA}, I_{rr}=3.0\text{mA}, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

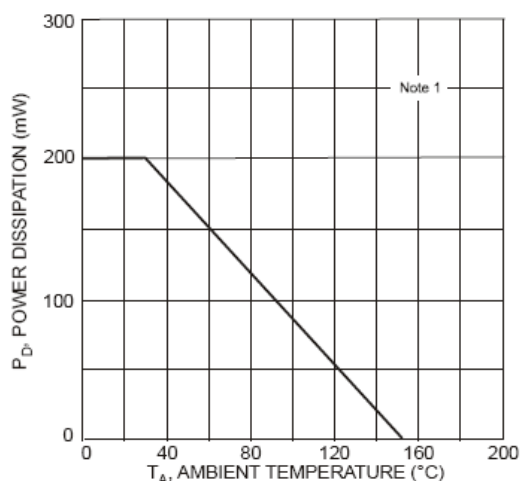


Fig. 1 Power Derating Curve

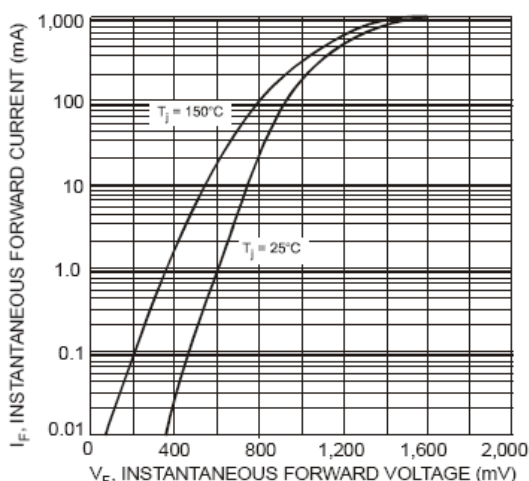


Fig. 2 Typical Forward Characteristics

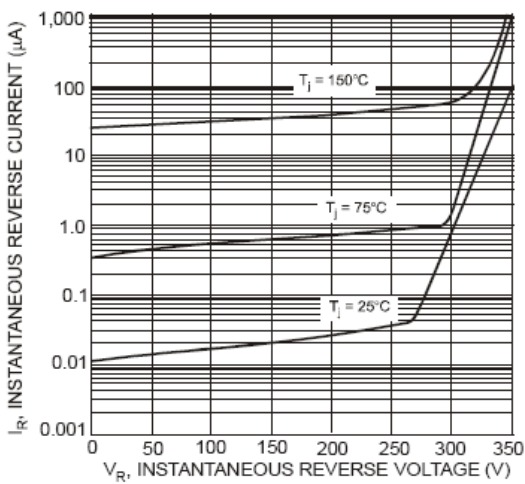


Fig. 3 Typical Reverse Characteristics

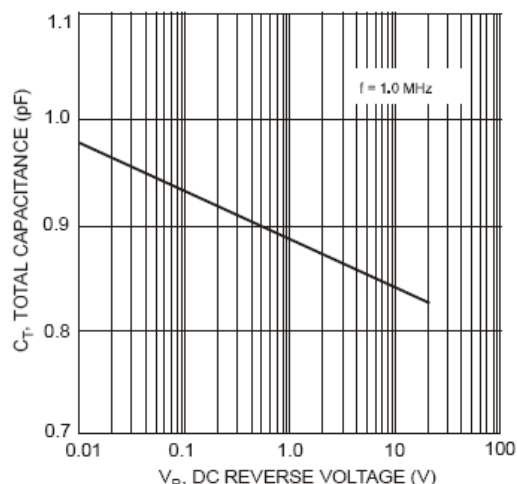


Fig. 4 Total Capacitance vs. Reverse Voltage

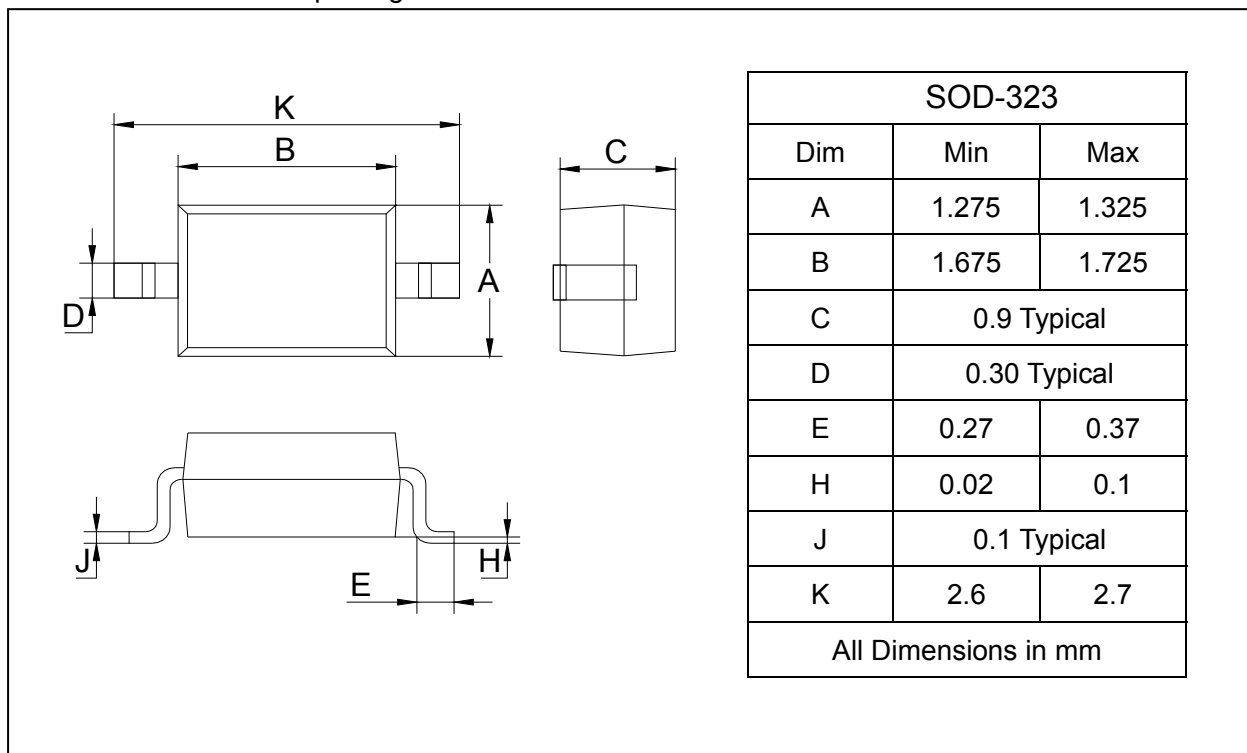
Surface Mount Low Leakage Diode

BAV3004WS

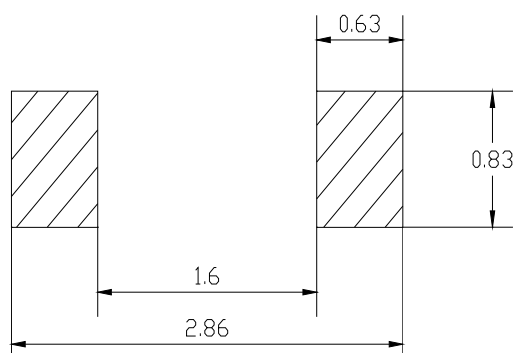
PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
BAV3004WS	SOD-323	3000/Tape&Reel