

## Silicon Epitaxial Planar Diode

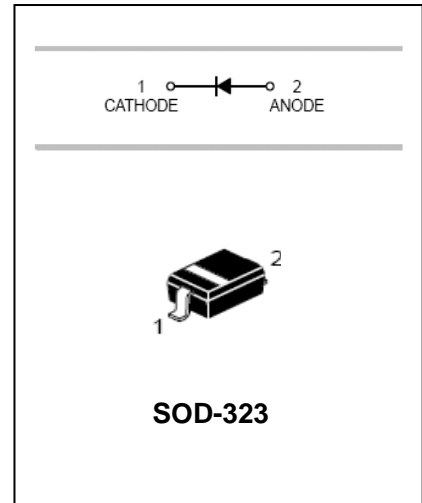
## BAV16WS

### FEATURES

- Fast Switching Speed:trr=4ns(Typ)
- Surface Mount Package Ideally Suited For Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- Available in Lead Free Version



Lead-free



### APPLICATIONS

- Surface mount fast switching diode

### ORDERING INFORMATION

Type No.	Marking	Package Code
BAV16WS	T6	SOD-323

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

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Reverse Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average Rectified Output Current	$I_o$	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 $\mu$ s	$I_{FSM}$	2.0	A
@t=1.0 s		1.0	
Power Dissipation	$P_d$	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	$^{\circ}C/W$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150	$^{\circ}C$

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	$I_R=1.0\mu A$
Forward Voltage	$V_F$	-	0.715 0.855 1.0 1.25	V	$I_F=1.0mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$
Reverse Current	$I_R$	-	1.0 25	$\mu A$ nA	$V_R=75V$ $V_R=20V$
Capacitance between terminals	$C_T$	-	2.0	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	4.0	ns	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

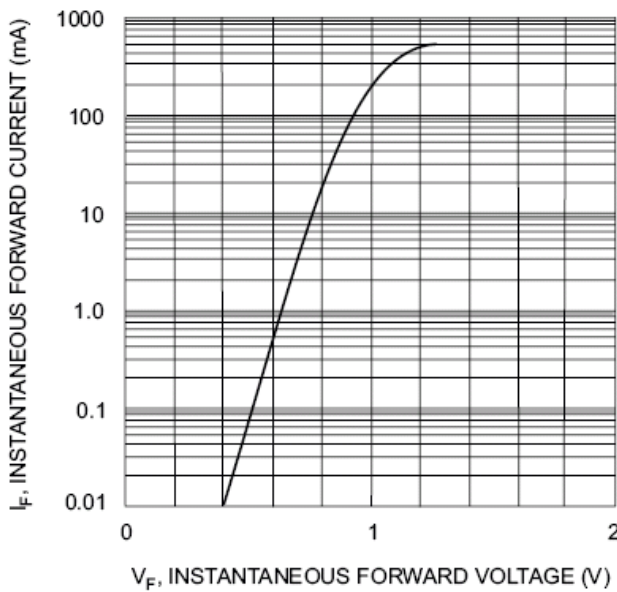


Fig. 1 Forward Characteristics

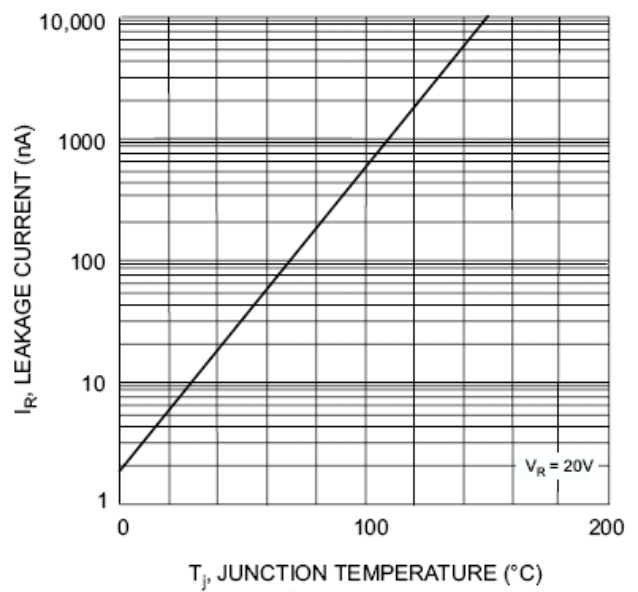


Fig. 2 Leakage Current vs Junction Temperature

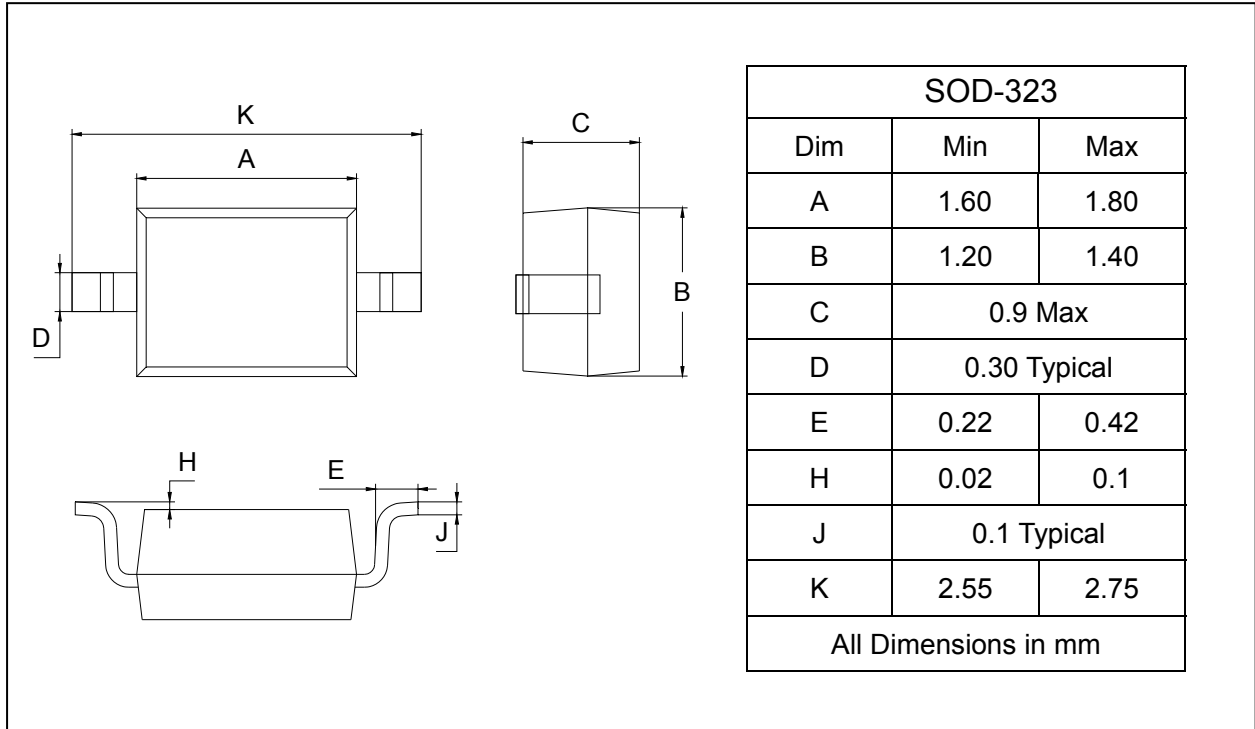
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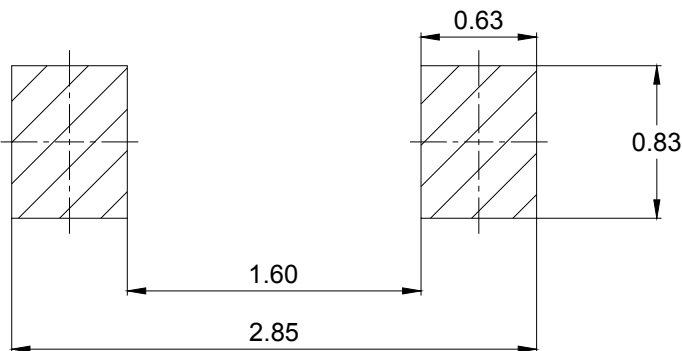
PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
BAV16WS	SOD-323	3000/Tape&Reel