

# BAS16WS

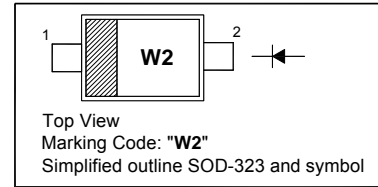
## Silicon Epitaxial Planar Switching Diode

### Features

- Fast switching diode

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

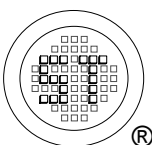


### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	75	V
Peak Reverse Voltage	$V_{RM}$	100	V
Forward Current (Continuous)	$I_F$	250	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	0.5 1 2	A
		at $t = 1\text{ s}$ at $t = 1\text{ ms}$ at $t = 1\text{ }\mu\text{s}$	
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	$V_F$	0.715 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}$ , $T_J = 150\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}$ , $T_J = 150\text{ }^\circ\text{C}$	$I_R$	1 30 50	$\mu\text{A}$
Diode Capacitance at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_{tot}$	2	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}$ , $I_R = 1\text{ mA}$ , $R_L = 100\text{ }\Omega$	$t_{rr}$	6	ns



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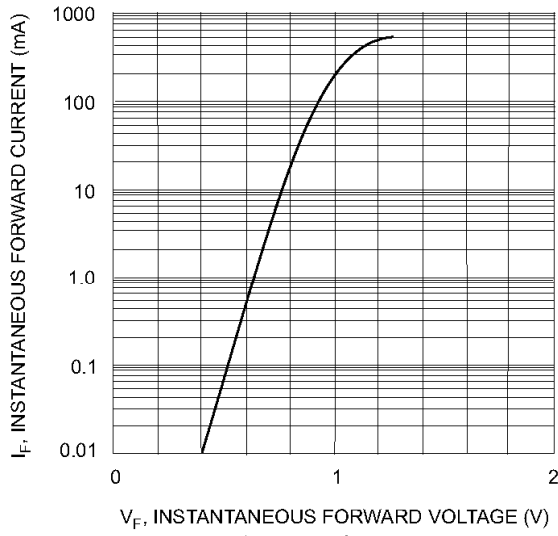


Fig. 1 Forward Characteristics

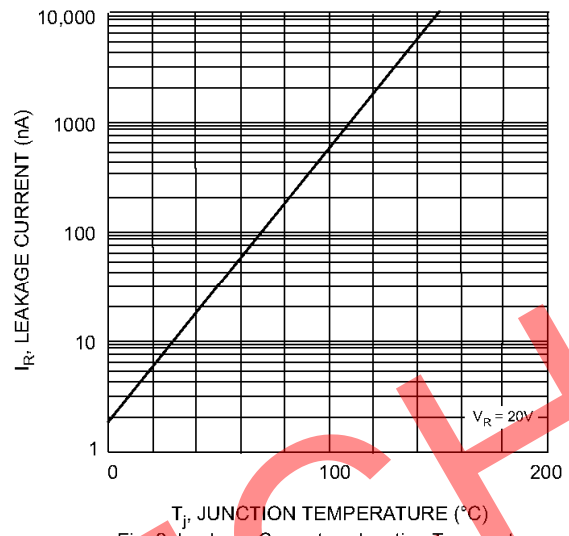
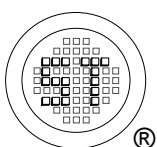


Fig. 2 Leakage Current vs Junction Temperature



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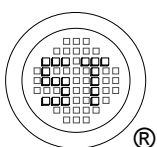
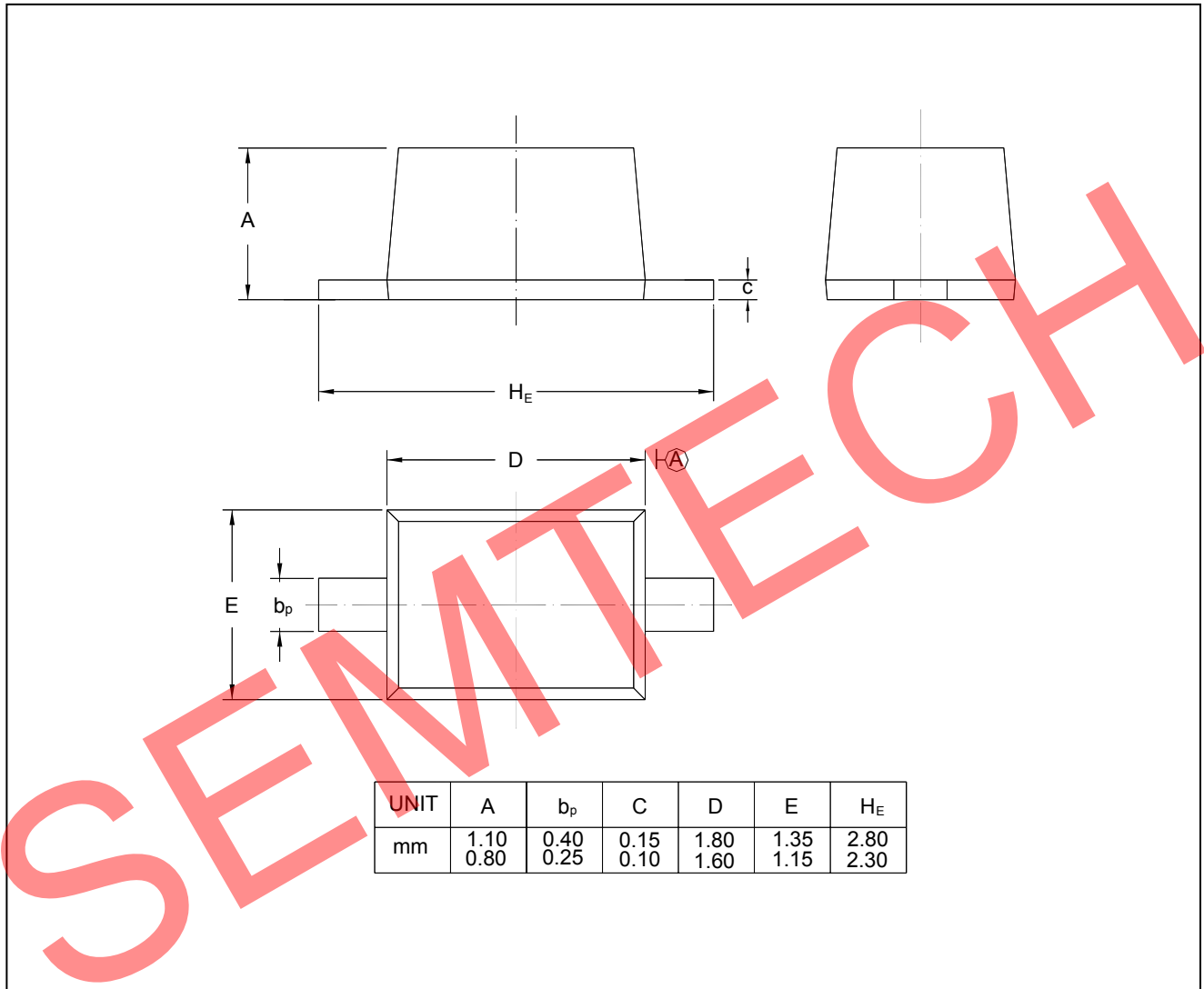


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## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



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