

BAS16WS-AH

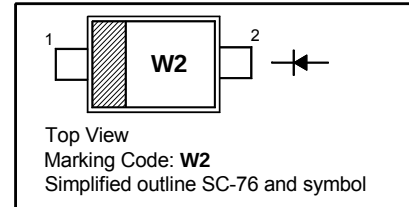
Silicon Epitaxial Planar Switching Diode

Features

- Fast switching diode
- AEC-Q101 is Available
- Halogen and Antimony Free(HAF), RoHS compliant

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

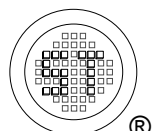


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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 at $t = 1\text{ s}$ at $t = 1\text{ ms}$ at $t = 1\text{ }\mu\text{s}$	I_{FSM}	0.5 1 2	A
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 $T_a = 25^\circ\text{C}$

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 $V_R = 25\text{ V}$, $T_j = 150^\circ\text{C}$ at $V_R = 75\text{ V}$, $T_j = 150^\circ\text{C}$	I_R	1 30 50	μA
Diode Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	2	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\text{ }\Omega$, $I_{rr} = 0.1 \times I_R$	t_{rr}	6	ns



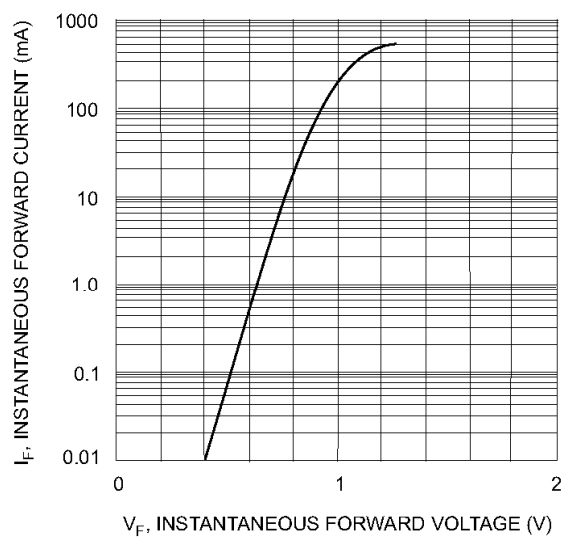


Fig. 1 Forward Characteristics

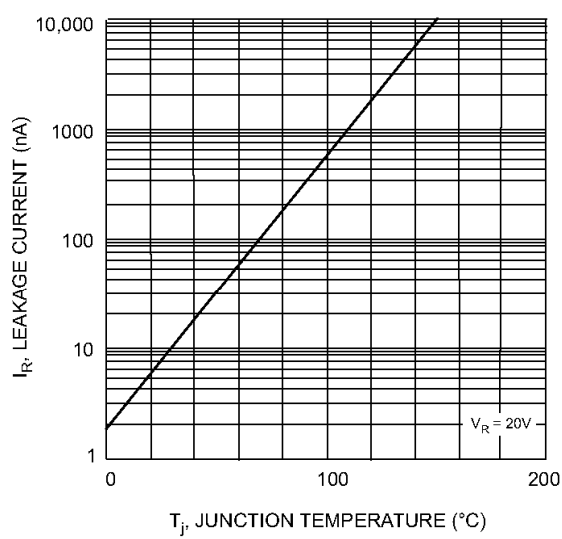
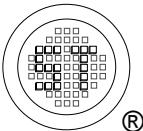


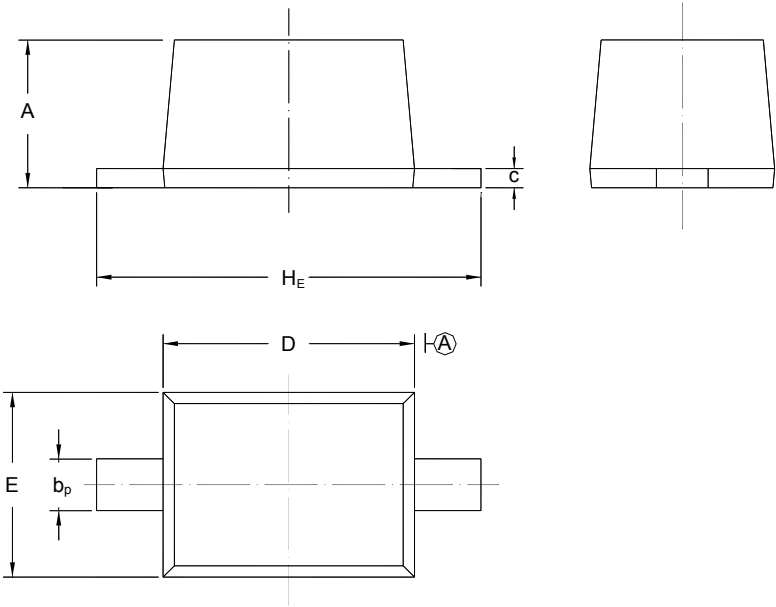
Fig. 2 Leakage Current vs Junction Temperature



PACKAGE OUTLINE

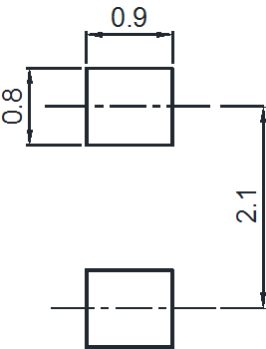
Plastic surface mounted package; 2 leads

SC-76



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SC-76	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

