

BAS316WS-BL-AH

Silicon Epitaxial Planar Switching Diode

Features

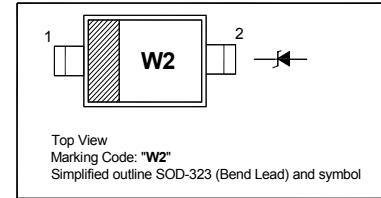
- AEC-Q101 Qualified and PPAP Capable
- Halogen and Antimony Free(HAF), RoHS compliant

Applications

- High-speed switching

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

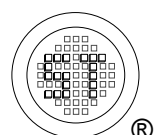


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

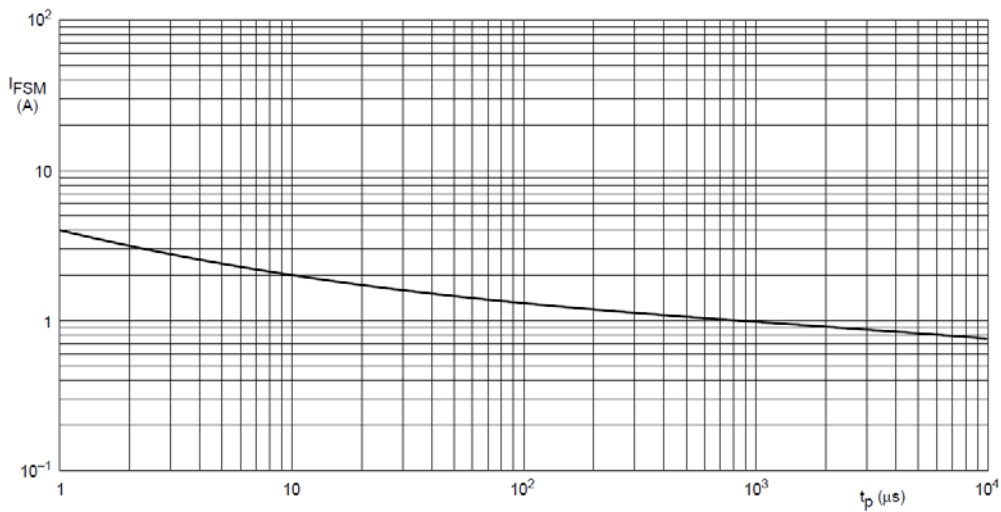
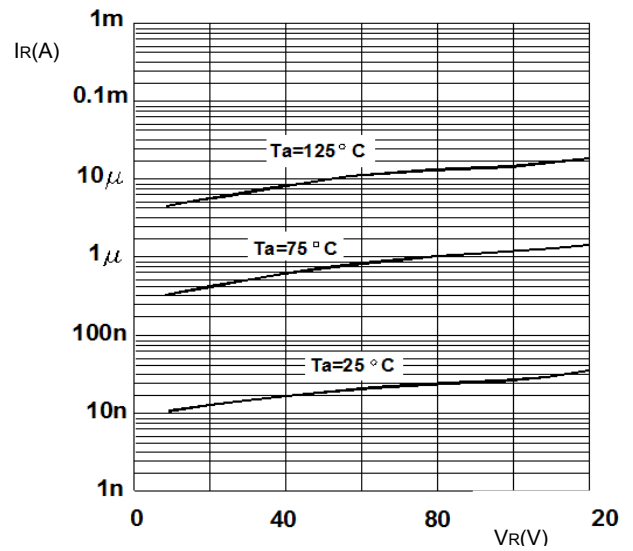
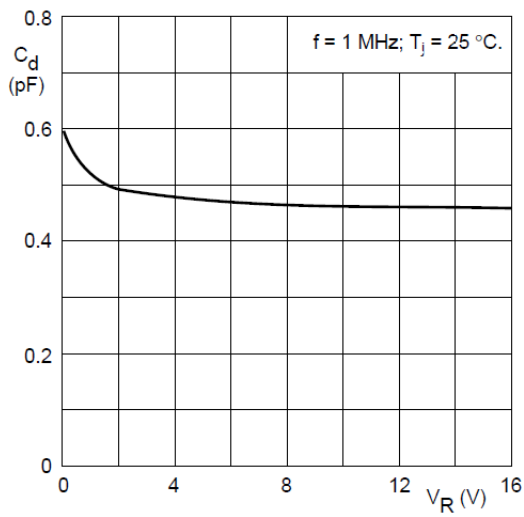
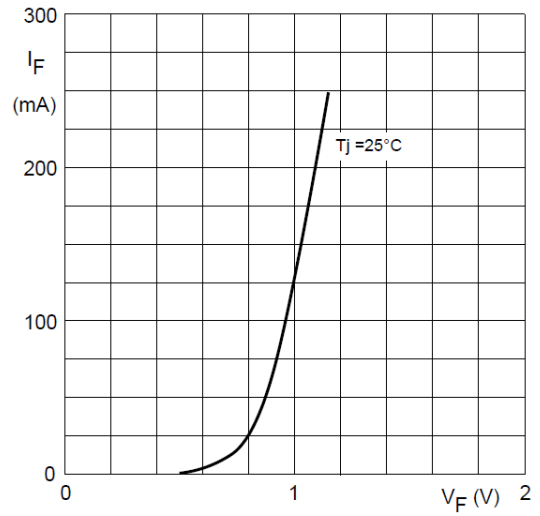
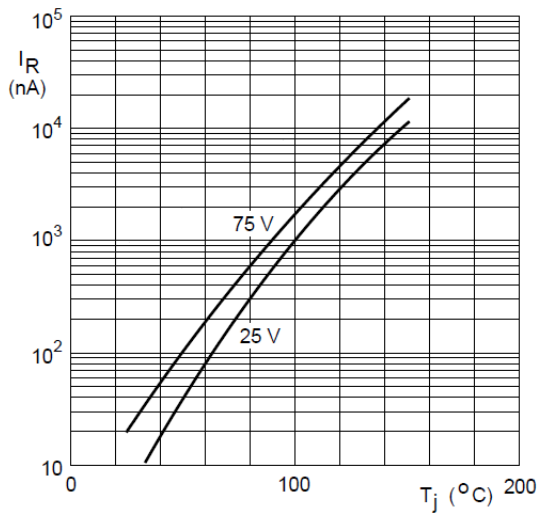
Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	100	V
Continuous Forward Current	I_F	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Current	I_{FSM}	4 1 0.5	A
	$t = 1 \mu\text{s}$ $t = 1 \text{ ms}$ $t = 1 \text{ s}$		
Total 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 $T_a = 25^\circ\text{C}$

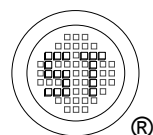
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 150 \text{ mA}$	V_F	0.715 0.855 1 1.25	V
Reverse Current at $V_R = 25 \text{ V}$ at $V_R = 75 \text{ V}$ at $V_R = 25 \text{ V}$, $T_j = 150^\circ\text{C}$ at $V_R = 75 \text{ V}$, $T_j = 150^\circ\text{C}$	I_R	30 1 30 50	nA μA μA μA
Diode Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_d	1.5	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}$, $t_{rr} = 0.1 \times I_R$, $R_L = 100 \Omega$	t_{rr}	4	ns



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Based on square wave currents.
 $T_j = 25^{\circ}\text{C}$ prior to surge.

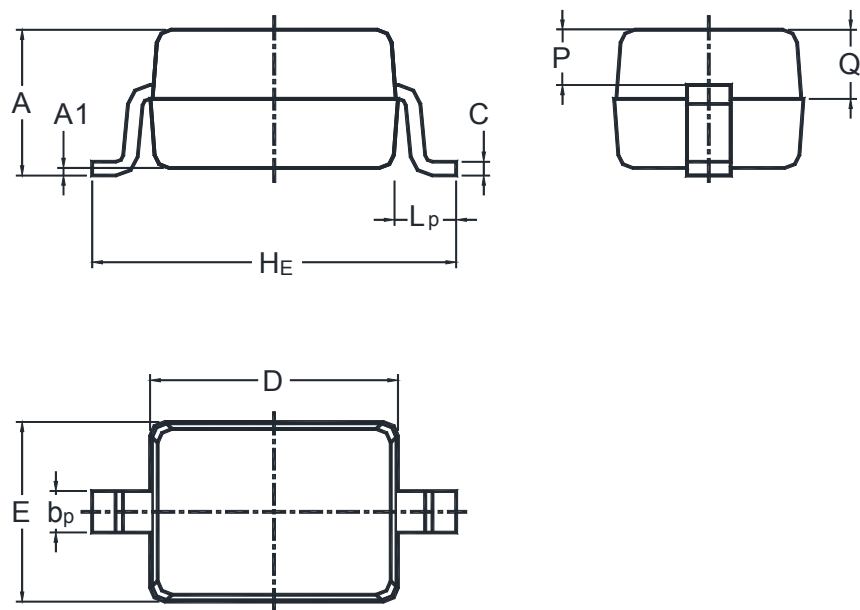


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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323(Bend Lead)



UNIT	A	A ₁	b _p	C	D	E	H _E	L _p	Q	P
mm	1.1 0.8	0.1 0	0.4 0.25	0.18 0.09	1.8 1.6	1.35 1.15	2.8 2.3	0.5 0.1	0.5 0.3	0.4 0.3

Recommended Soldering Footprint

