

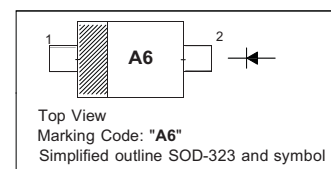
BAS316WS Silicon Epitaxial Planar Switching Diode

Applications

- High-speed switching

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



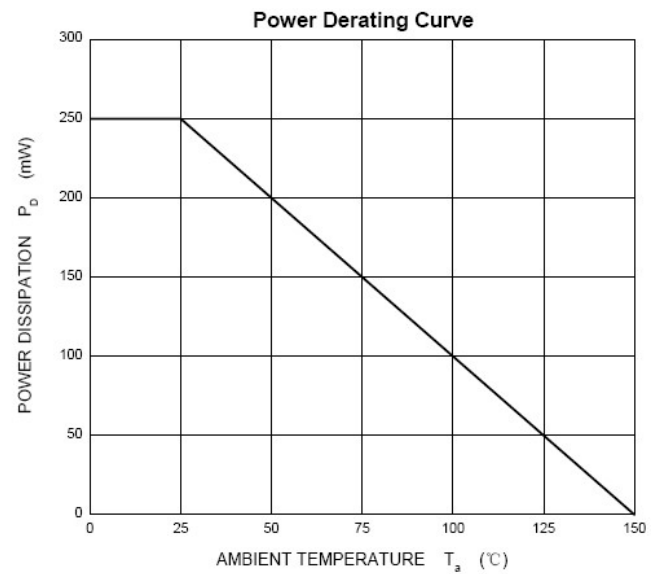
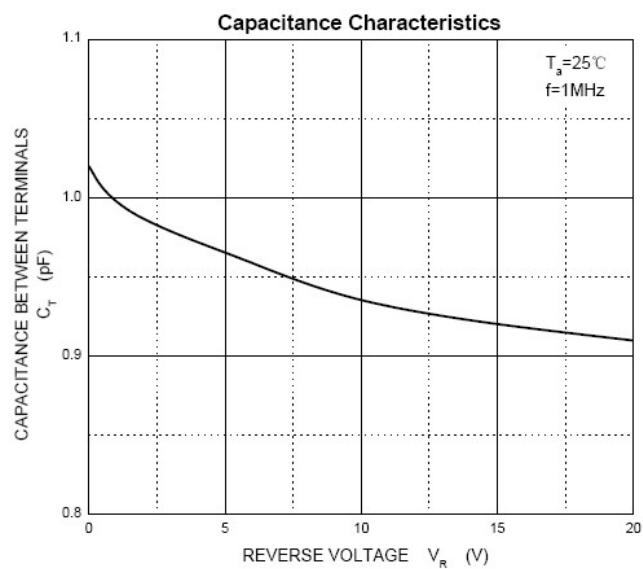
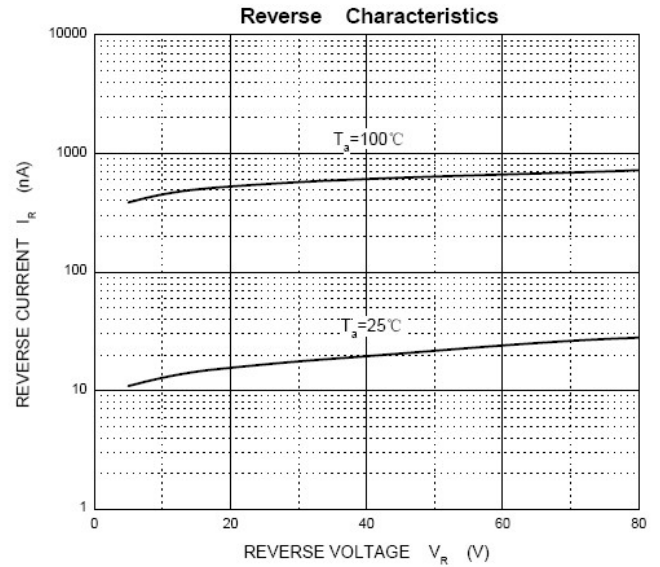
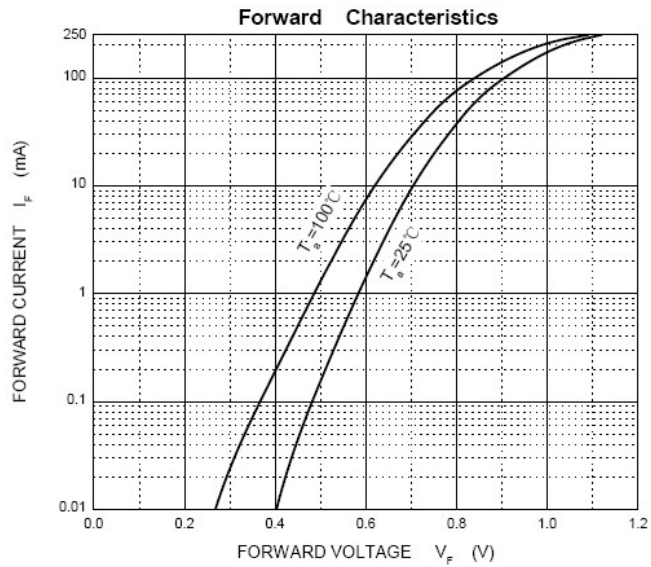
Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)

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 Surge Current at $t_p=8.3\text{ms}$, $T_a=25\text{ }^{\circ}\text{C}$	I_{FSM}	2	A
Total Power Dissipation	P_{tot}	250	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 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 Current at $V_R = 25\text{ V}$ at $V_R = 75\text{ V}$	I_R	30 1	nA μA
Diode Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	1.5	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\text{ }\Omega$	t_{rr}	4	ns

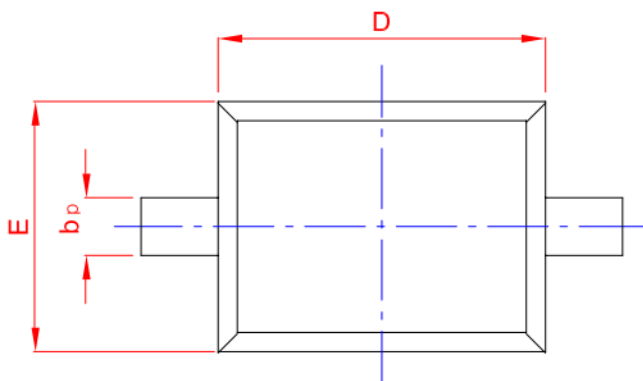
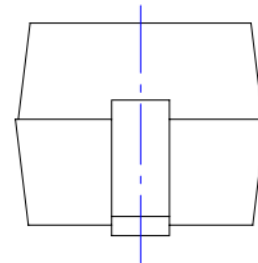
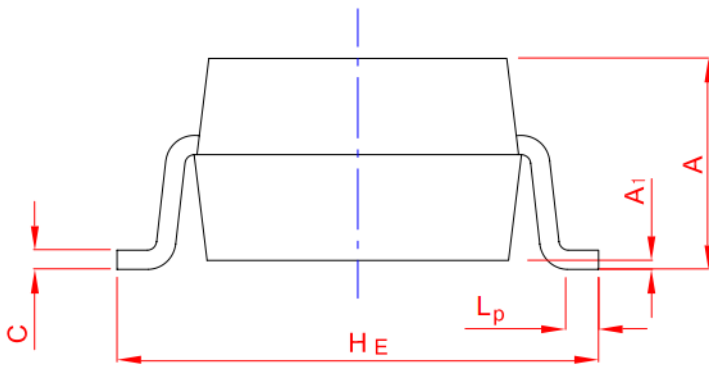
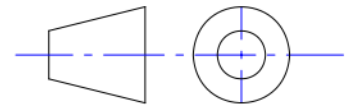
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20 0.80	0.40 0.25	0.18 0.08	1.80 1.60	1.40 1.15	2.80 2.30	0.10 0.00	0.50 0.10