

BAS316 SWITCHING DIODE

FEATURES

- Very Small Plastic Package
- High Switching Speed

APPLICATIONS

- High-Speed Switching in e.g. Surface Mounted Circuits



RoHS
COMPLIANT



SOD-323

The marking bar indicates the cathode

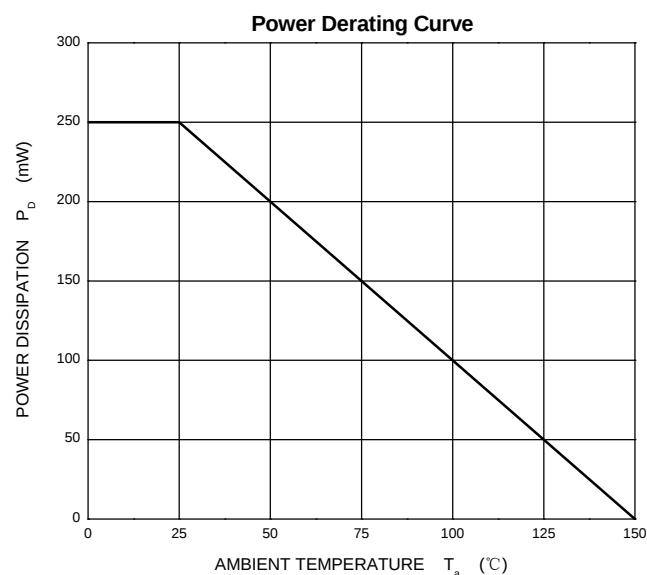
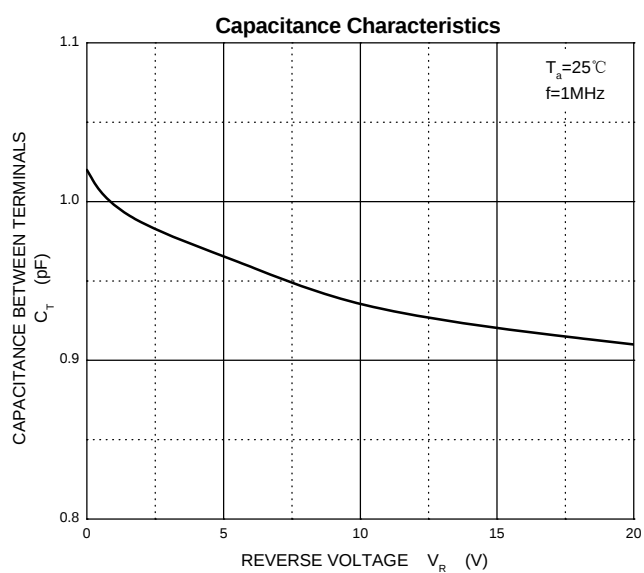
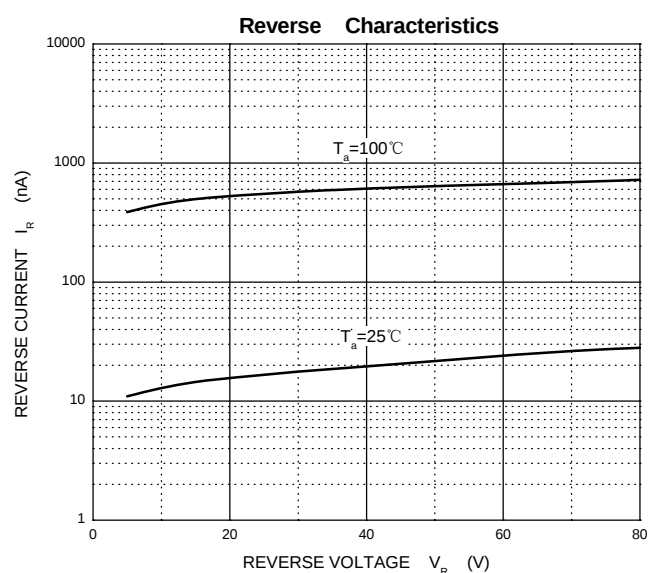
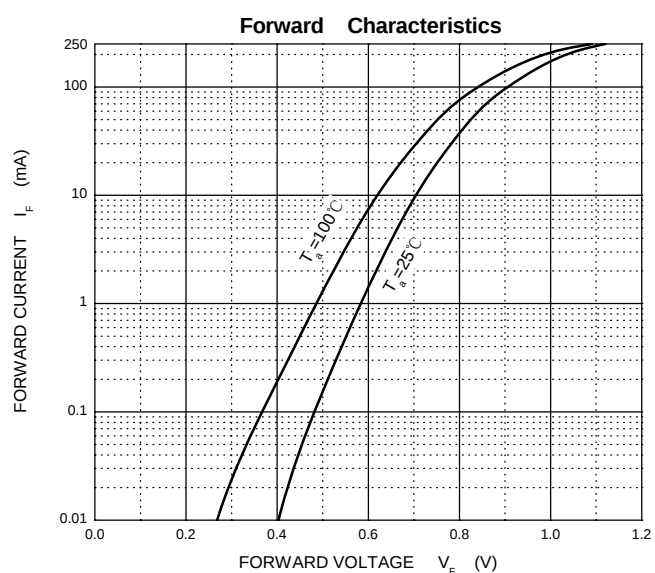
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	85	V
V_R	DC Blocking Voltage	75	
I_o	Continuous Forward Current	250	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	2.0	A
P_D	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	$^\circ\text{C/W}$
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

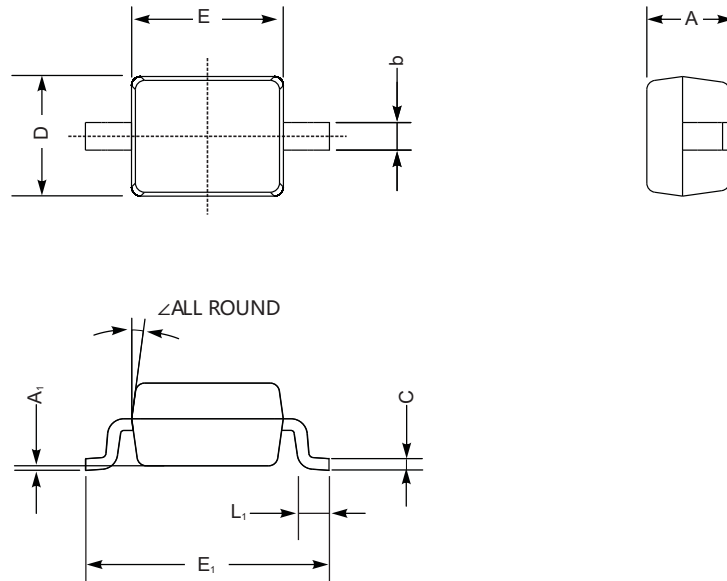
ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	100			V
Reverse current	I_R	$V_R=25\text{V}$			30	nA
		$V_R=75\text{V}$			1	μA
Forward voltage	V_F	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	
		$I_F=50\text{mA}$			1	
		$I_F=150\text{mA}$			1.25	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$			1.5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}, I_R=0.1 \times I_R$			4	ns

Typical Characteristics



Package Outline



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

Ordering Information

Device	Package	Shipping
BAS316	SOD-323	3000PCS/Reel&Tape