



BAS16WS

Silicon Epitaxial Planar Switching Diode

Features

- Fast switching diode
- For surface mount application

SOD-323



1.Cathode —|<— 2.Anode

Marking Code : SM

Absolute Maximum Ratings at $T_A = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Forward Current (Continuous)	I_{FRM}	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
Maximum Power Dissipation	P_D	200	mW
Operating Temperature Range	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

Electrical Characteristics at $T_A = 25^\circ\text{C}$

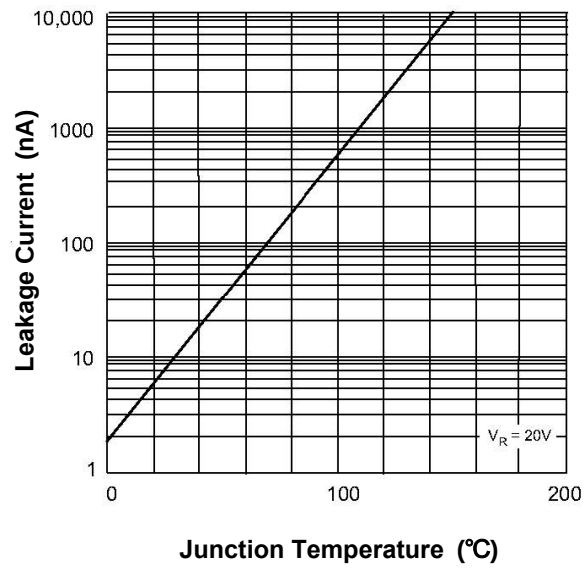
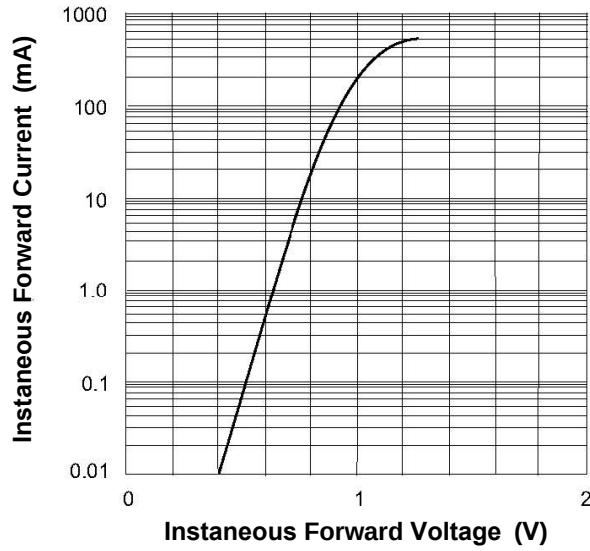
Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	0.715 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}, T_J = 150^\circ\text{C}$ at $V_R = 75\text{ V}, T_J = 150^\circ\text{C}$	I_R	1 30 50	μA
Total Capacitance at $V_R = 0\text{ V}, f = 1\text{ MHz}$	C_T	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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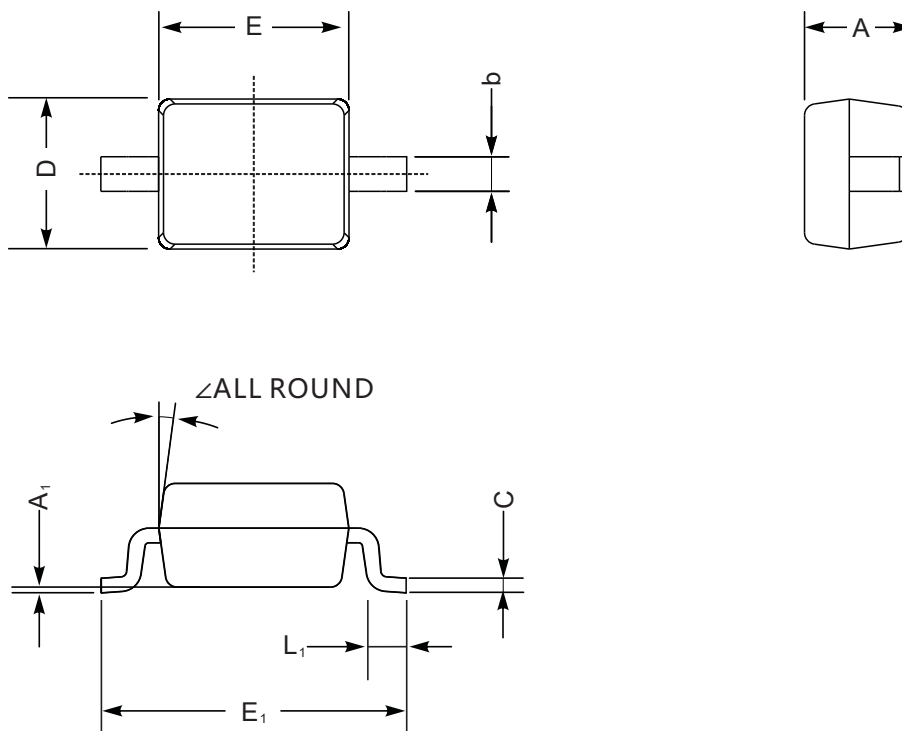
Typical Characteristic Curves



Package Outline

SOD-323

Dimensions in mm



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	—	