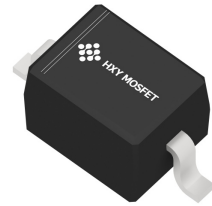




Features

Low Forward Voltage Drop
Fast Switching Time
Surface Mount Package Ideally Suited for Automatic Insertion



SOD-323



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAT42WS-7-F	SOD-323	S8	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

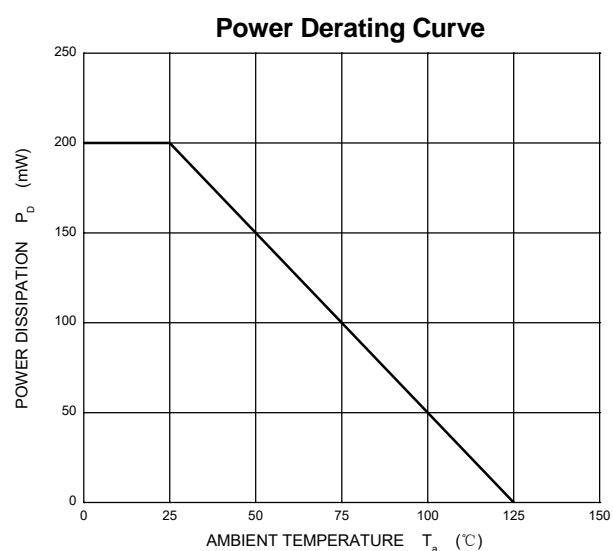
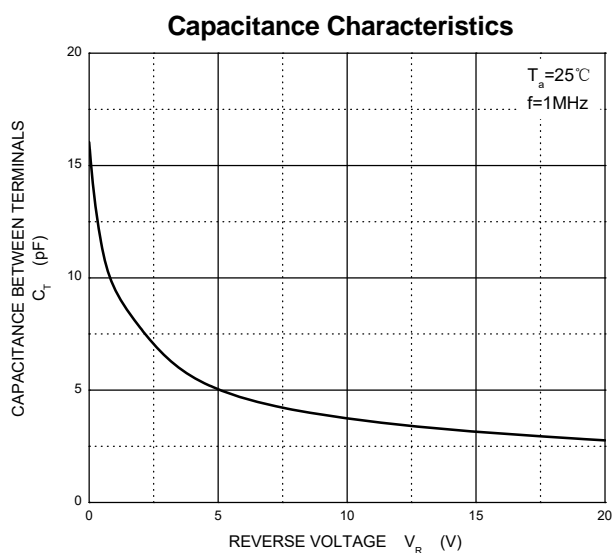
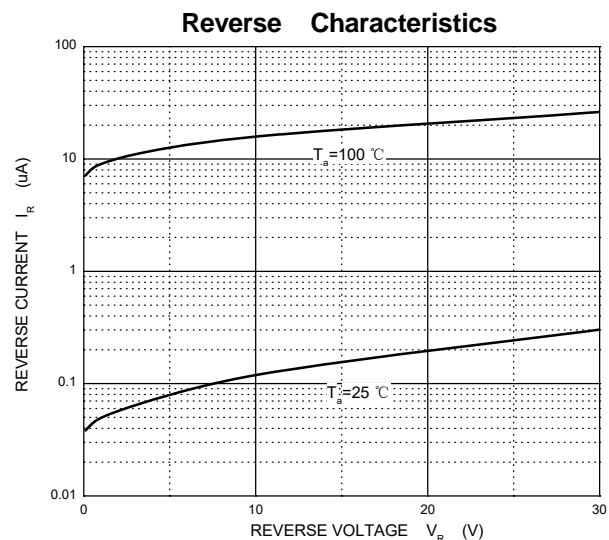
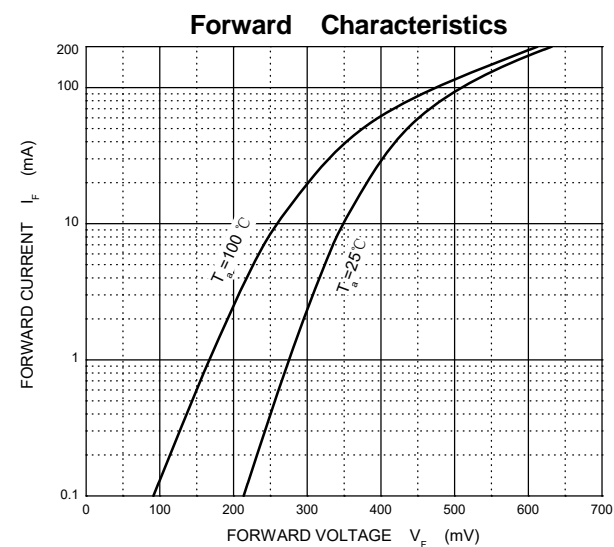
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Forward Continuous Current	I_{FM}	200	mA
Repetitive Peak Forward Current @t<1.0s	I_{FRM}	500	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	4.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	T_J	-40 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Min	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	30		V	$I_R=10\mu A$
Forward voltage	V_F	0.26	0.33	V	$I_F=2mA$
	V_F		0.45	V	$I_F=15mA$
Reverse current	I_R		0.5	μA	$V_R=25V$
Capacitance between terminals	C_T		10	pF	$V_R=1.0V, f=1.0MHz$
Reverse recovery time	t_{rr}		5	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

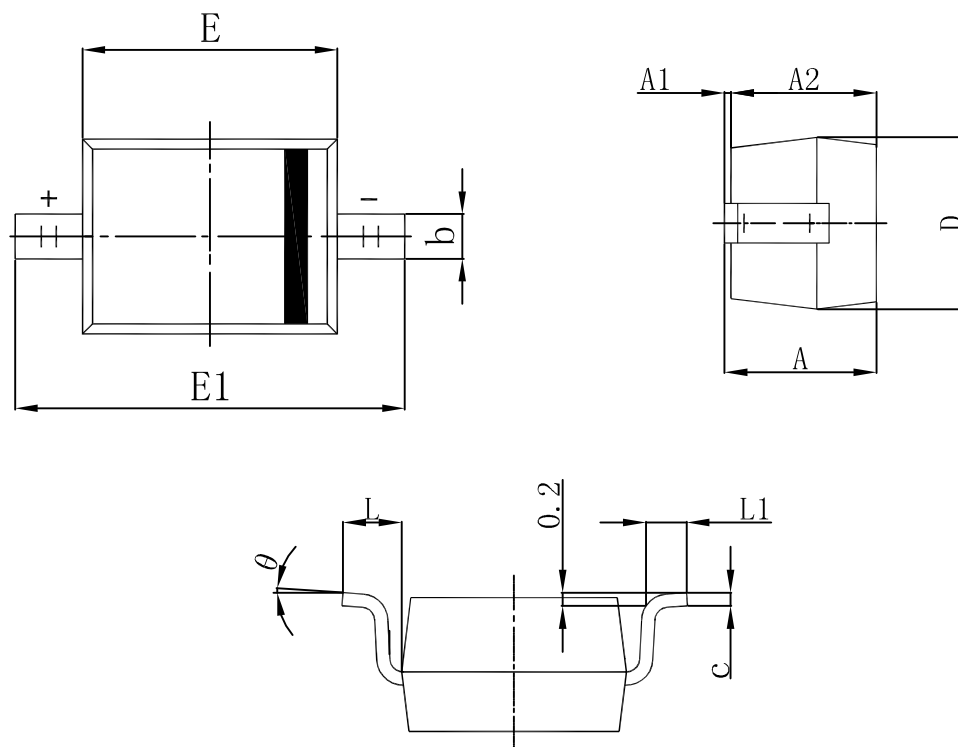


Typical Characteristics





SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



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