

Features

High breakdown voltage.

Low turn-on voltage.

Guard ring construction for transient protection.

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAT46WS	SOD-323	S9	3000



SOD-323



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

Cymbol	Doromotor	Valius	Unit	
Symbol	Parameter	Valiue	Unit	
V_{RRM}	Peak Repetitive Peak Reverse Voltage	100	V	
V_{RWM}	Working Peak Reverse Voltage	100	V	
I _{FM}	Forward Continuous Current	150	mA	
IFRM	Repetitive peak forward current (Note 1)	350	mA	
	@tp<1.0s, Duty Cycle < 50%	330	ША	
I _{FSM}	Non-repetitive Peak Forward Surge	750		
	Current@8.3mS	750	mA	
P _d	Power Dissipation	150	mW	
R _{⊝JA}	Thermal Resistance From Junction To Ambient	667	°C/W	
TJ	Operation Junction Temperature Range	-40~+125	°C	
T _{STG}	Storage Temperature Range	-55~+150	°C	

Electrcal Charcteristics (Ta=25°C unless otherwise specified)

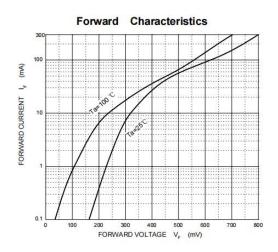
Symbol	Parameter	Test conditions	Min	Тур	Max	Unit
V _(BR)	Reverse breakdown voltage	I _R =100μA	100			V
I _R		V _{R1} =1.5V			0.3	μA
	Reverse voltage leakage current	V _{R2} =10V			0.5	μA
		V _{R3} =50V			1.0	μA
		V _{R4} =75V			2.0	μA
V _F (1)		I _F =0.1mA			0.25	V
V _F (2)	Forward voltage(Note 2)	I _F =10mA			0.45	V
V _F (3)		I _F =250mA			1.00	V
Ст	Diode capacitance	V _R =0V, f=1.0MHz		20		pF
		V _R =1V, f=1.0MHz		12		pF

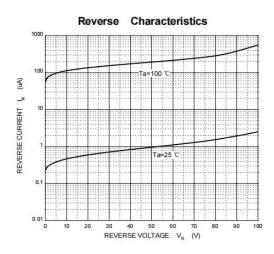
Notes: 1. Part mounted on FR-4 board with recommended pad layout.

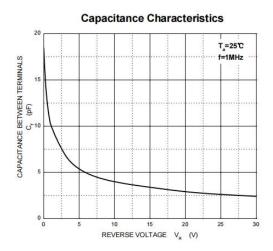
2. Short duration pulse test used to minimize self-heating effect.

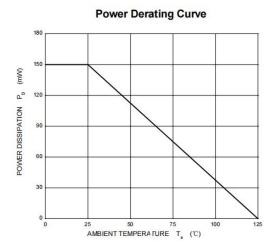


Typical Characteristics



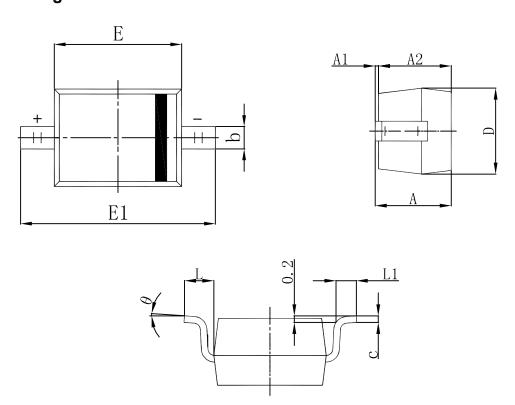








SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches		
	Min	Max	Min	Max	
Α		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	
С	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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