



GP
ELECTRONICS

BAT46WS

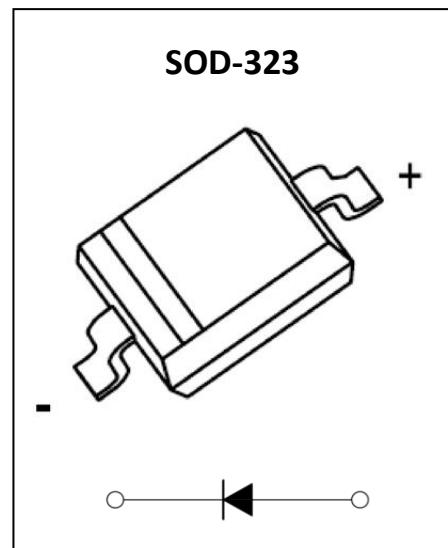
100V-0.15A Schottky Barrier Diode

BAT46WS Schottky Barrier Diode

Feature

- Extremely Fast Switch Speed
- Low Forward Voltage

MARKING:



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

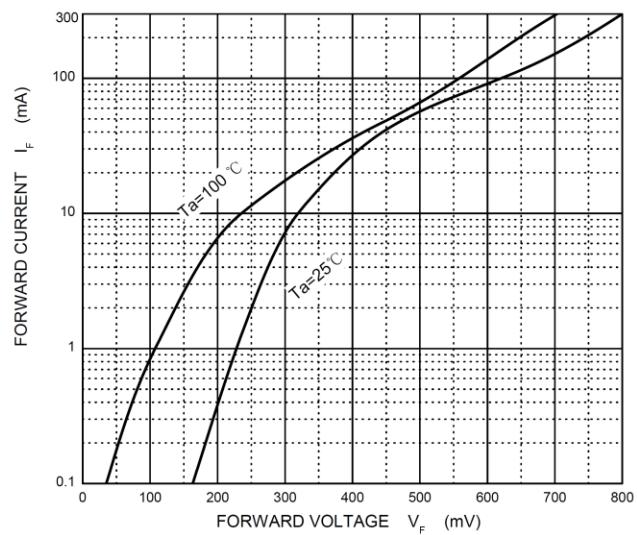
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	100	V
Mean rectifying current	I_o	0.15	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	0.75	A
Power Dissipation	P_D	0.20	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

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

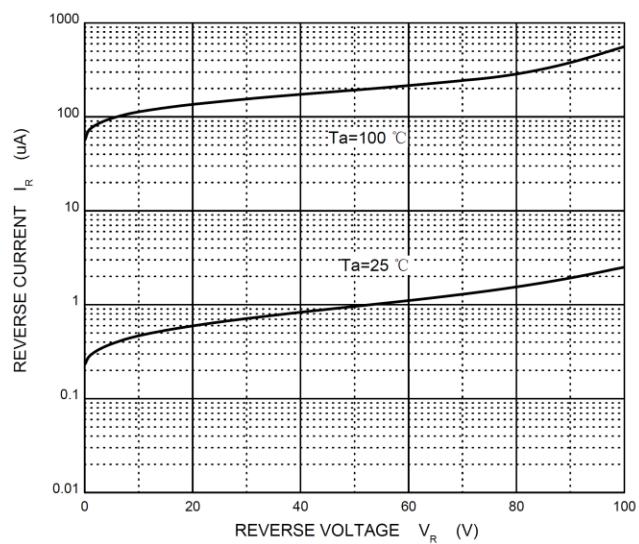
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	100			V
Forward voltage	V_{F1}	$I_F=0.1\text{mA}$			0.25	V
		$I_F=10\text{mA}$			0.45	
		$I_F=250\text{mA}$			1	
Reverse current	I_R	$V_R=1.5\text{V}$			0.3	μA
		$V_R=10\text{V}$			0.5	
		$V_R=50\text{V}$			1	
		$V_R=75\text{V}$			2	
Capacitance between terminals	C_T	$V_R=0\text{V}, f=1\text{MHz}$	20			pF
		$V_R=1\text{V}, f=1\text{MHz}$	12			

Typical Characteristics

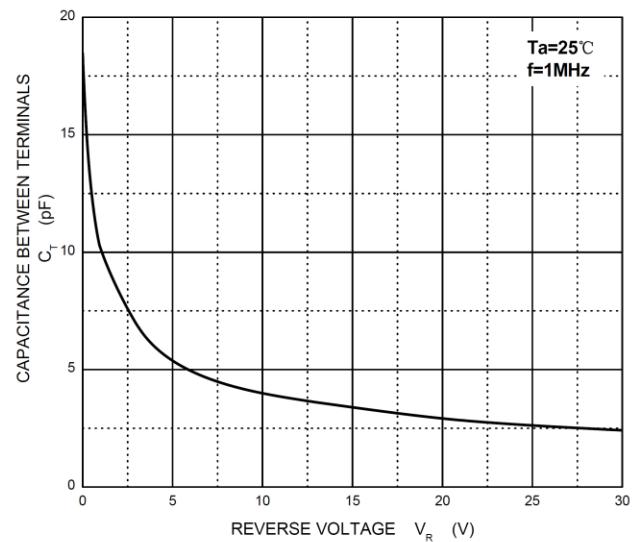
Forward Characteristics



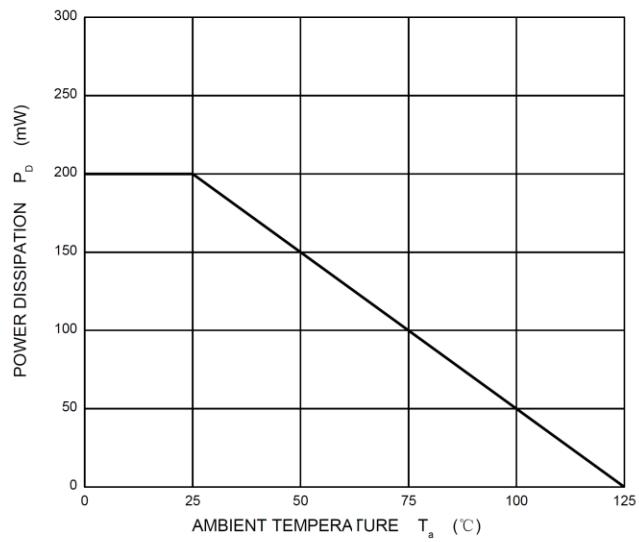
Reverse Characteristics

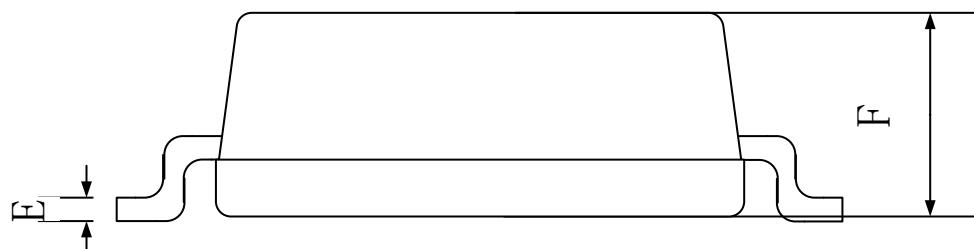
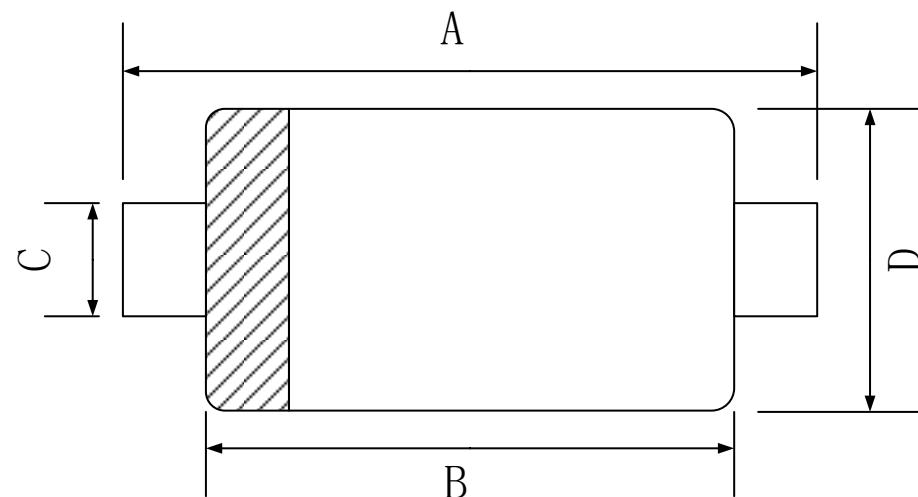


Capacitance Characteristics



Power Derating Curve



SOD-323 Package Outline Dimensions


Symbol	Dimensions In Millimeters		
	Min.		Min.
A	2.30	A	2.30
B	1.60	B	1.60
C	0.25	C	0.25
D	1.15	D	1.15
E	0.089	E	0.089
F	0.80	F	0.80