

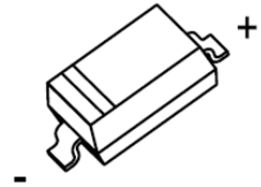


### BA T46WS SCHOTTKY BARRIER DIODE



#### FEATURES

- High breakdown voltage
- Low turn-on voltage
- Guard ring construction for transient protection



MARKING: S9

**SOD-323**

#### Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Peak repetitive peak reverse voltage	$V_{RRM}$	100	V
Working peak reverse voltage	$V_{RWM}$		
Forward continuous current	$I_F$	150	mA
Repetitive peak forward current (Note 1) @ tp < 1.0s, Duty Cycle < 50%	$I_{FRM}$	350	mA
Non-repetitive Peak Forward surge current @ t = 8.3ms	$I_{FSM}$	750	mA
Power dissipation	$P_D$	500	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	200	°C/W
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{STG}$	-55~+150	°C

#### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage(Note 2)	$V_R$	$I_R=100\mu A$	100			V
Reverse voltage leakage current	$I_R$	$V_{R1}=1.5V$			0.3	$\mu A$
		$V_{R2}=10V$			0.5	
		$V_{R3}=50V$			1	
		$V_{R4}=75V$			2	
Forward voltage(Note 2)	$V_F$	$I_{F1}=0.1mA$			0.30	V
		$I_{F2}=10mA$			0.45	
		$I_{F3}=250mA$			1	
Diode capacitance	$C_T$	$V_R=0, f=1MHz$		20		pF
		$V_R=1V, f=1MHz$		12		

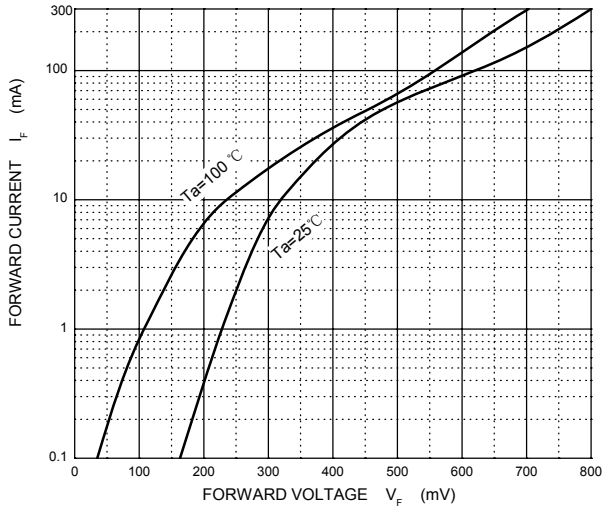
Notes: 1. Part mounted on FR-4 board with recommended pad layout

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

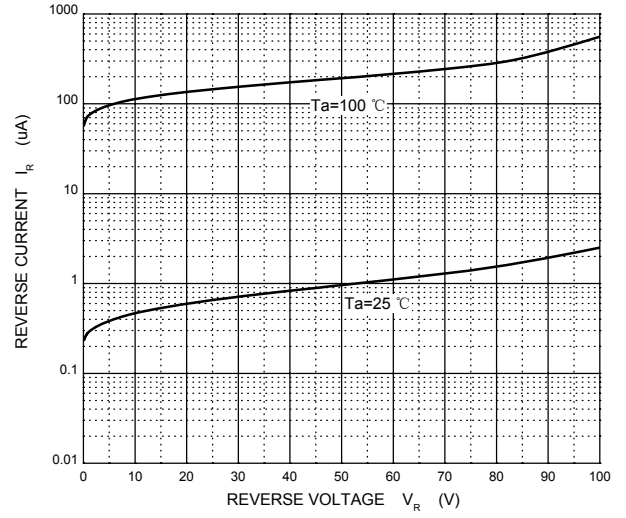


## Typical Characteristics

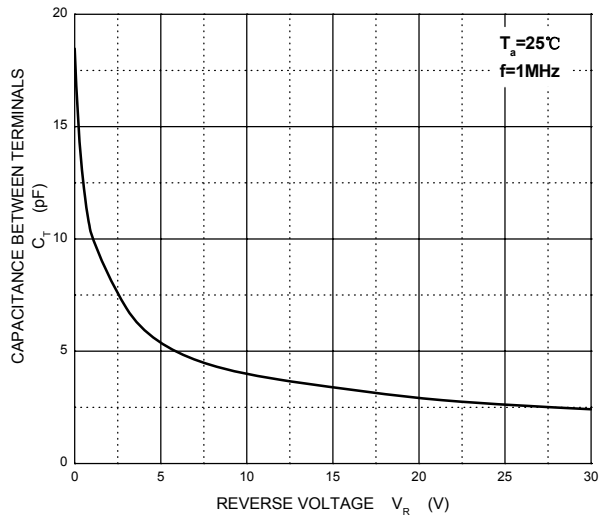
### Forward Characteristics



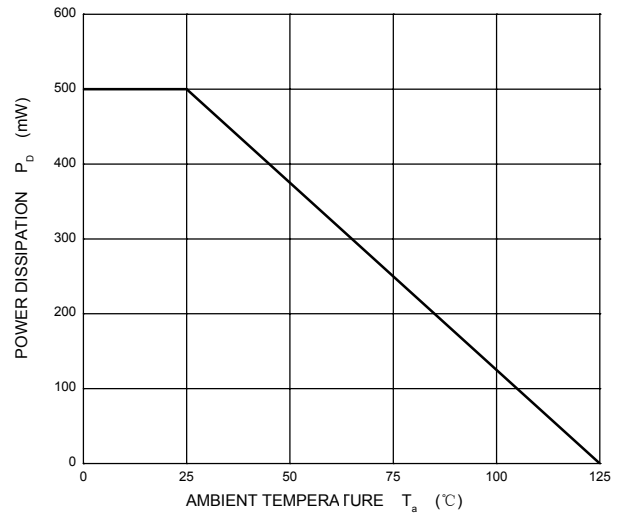
### Reverse Characteristics



### Capacitance Characteristics



### Power Derating Curve





## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

