

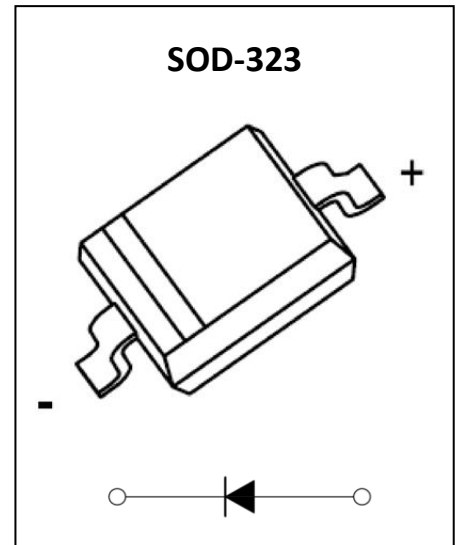


#### BAT54WS Schottky Barrier Diode

##### Feature

- Extremely Fast Switch Speed
- Low Forward Voltage

##### MARKING:



#### ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

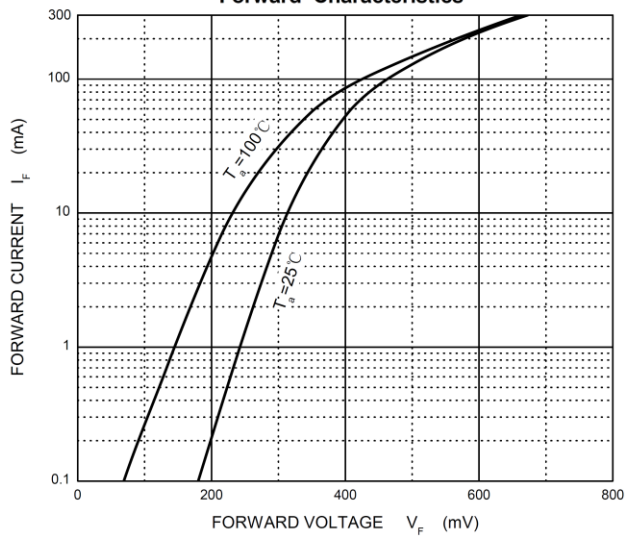
Parameter	Symbol	Value	Unit
DC reverse voltage	V <sub>R</sub>	30	V
Mean rectifying current	I <sub>O</sub>	0.1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I <sub>FSM</sub>	0.6	A
Power Dissipation	P <sub>D</sub>	0.15	W
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	667	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise noted)

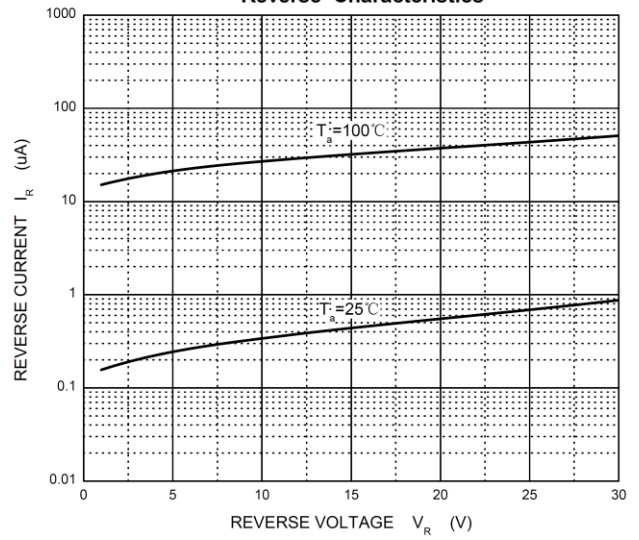
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	V <sub>(BR)</sub>	I <sub>R</sub> =100μA	30			V
Forward voltage	V <sub>F1</sub>	I <sub>F</sub> =0.1mA			0.24	V
	V <sub>F2</sub>	I <sub>F</sub> =1mA			0.32	V
	V <sub>F3</sub>	I <sub>F</sub> =10mA			0.40	V
	V <sub>F4</sub>	I <sub>F</sub> =30mA			0.50	V
	V <sub>F5</sub>	I <sub>F</sub> =100mA			1	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =25V			2	μA
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =10mA, I <sub>R</sub> =10mA to 1mA, R <sub>L</sub> =100Ω			5	ns
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> =1V, f=1MHz			10	pF

**Typical Characteristics**

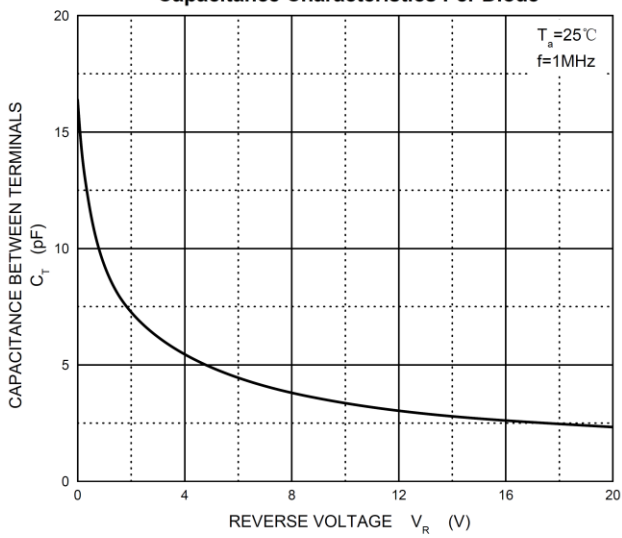
**Forward Characteristics**



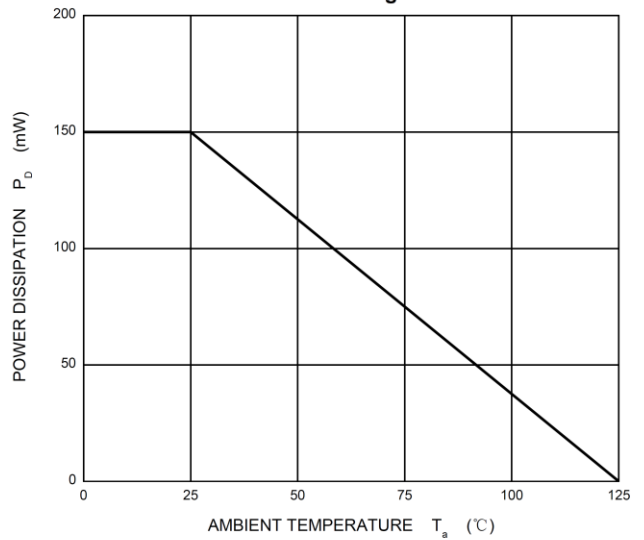
**Reverse Characteristics**



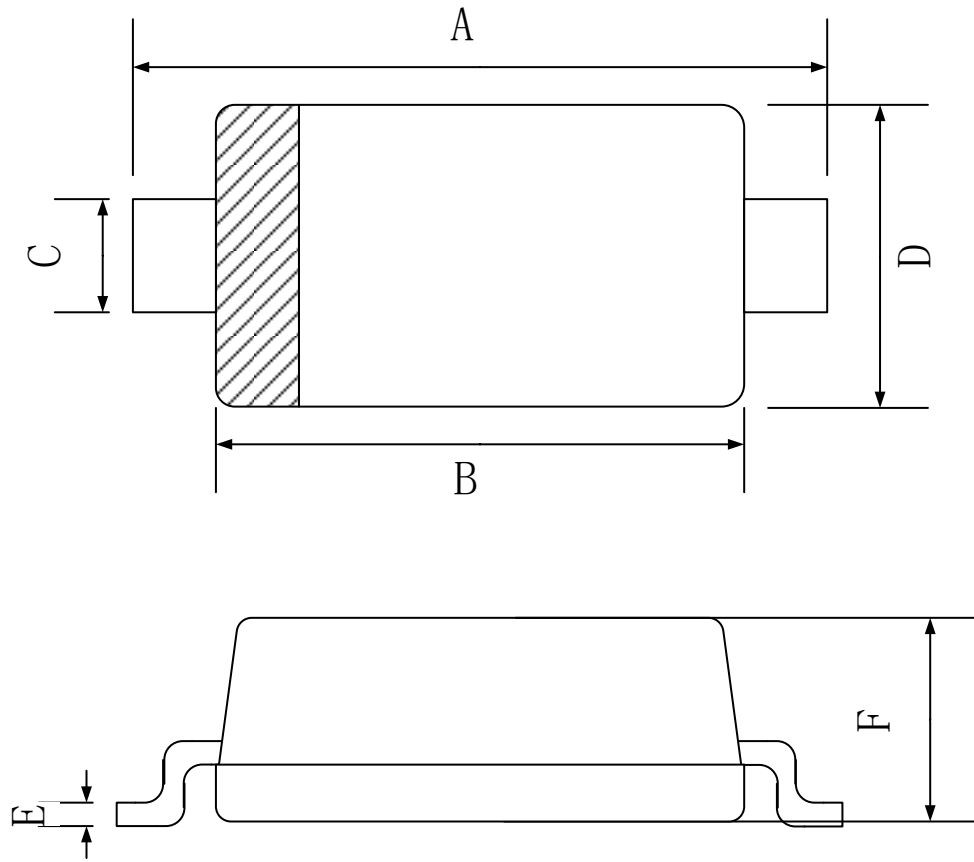
**Capacitance Characteristics Per Diode**



**Power Derating Curve**



## SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	2.30	2.50	2.70
B	1.60	1.70	1.90
C	0.25	0.325	0.40
D	1.15	1.25	1.35
E	0.089	1.095	0.101
F	0.80	0.90	1.00