

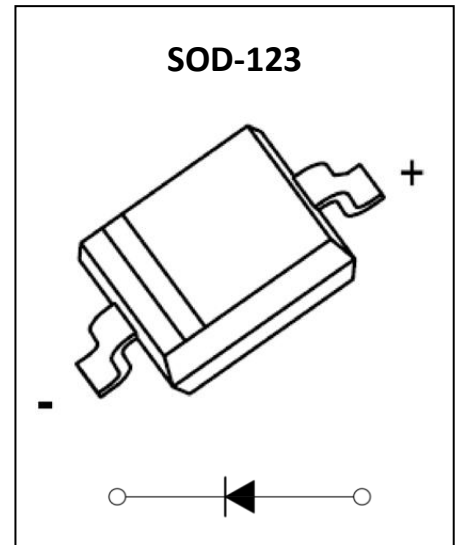


#### BAT54W Schottky Barrier Diode

##### Feature

- Extremely Fast Switch Speed
- Low Forward Voltage

##### MARKING:



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

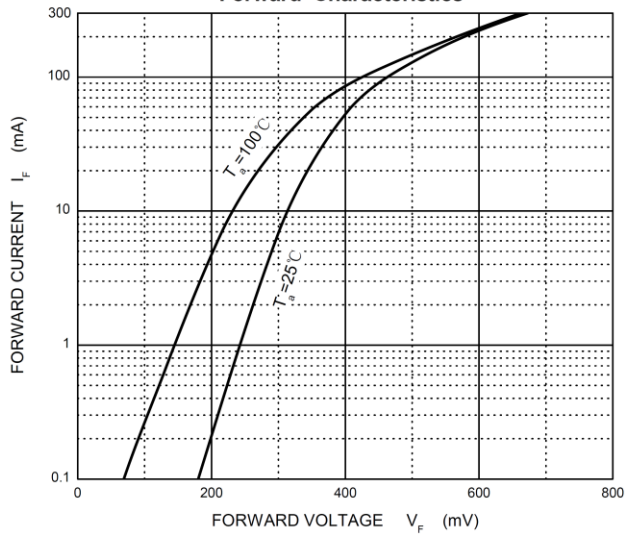
Parameter	Symbol	Value	Unit
DC reverse voltage	$V_R$	30	V
Mean rectifying current	$I_O$	0.1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	0.6	A
Power Dissipation	$P_D$	0.15	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	667	$^{\circ}\text{C}/\text{W}$
Junction 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)

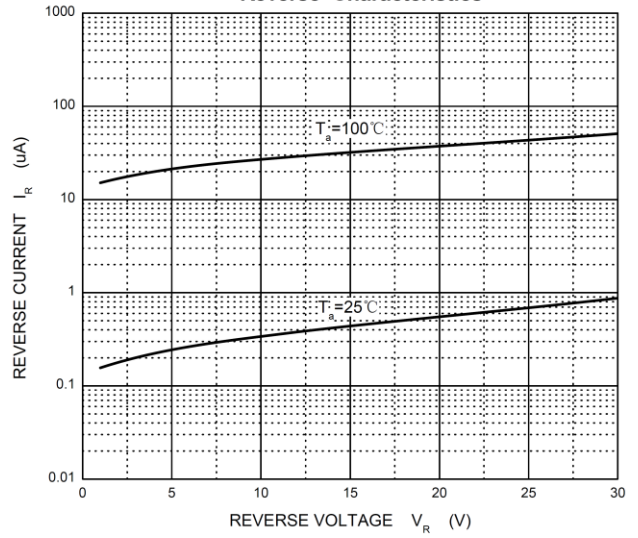
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30			V
Forward voltage	$V_{F1}$	$I_F=0.1\text{mA}$			0.24	V
	$V_{F2}$	$I_F=1\text{mA}$			0.32	V
	$V_{F3}$	$I_F=10\text{mA}$			0.40	V
	$V_{F4}$	$I_F=30\text{mA}$			0.50	V
	$V_{F5}$	$I_F=100\text{mA}$			1	V
Reverse current	$I_R$	$V_R=25\text{V}$			2	$\mu\text{A}$
Reverse recovery time	$t_{rr}$	$I_F=10\text{mA}, I_R=10\text{mA to }1\text{mA}, R_L=100\Omega$			5	ns
Capacitance between terminals	$C_T$	$V_R=1\text{V}, f=1\text{MHz}$			10	pF

**Typical Characteristics**

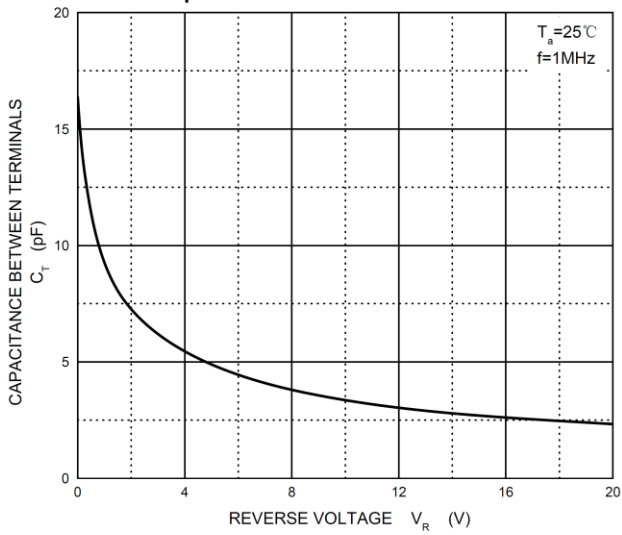
**Forward Characteristics**



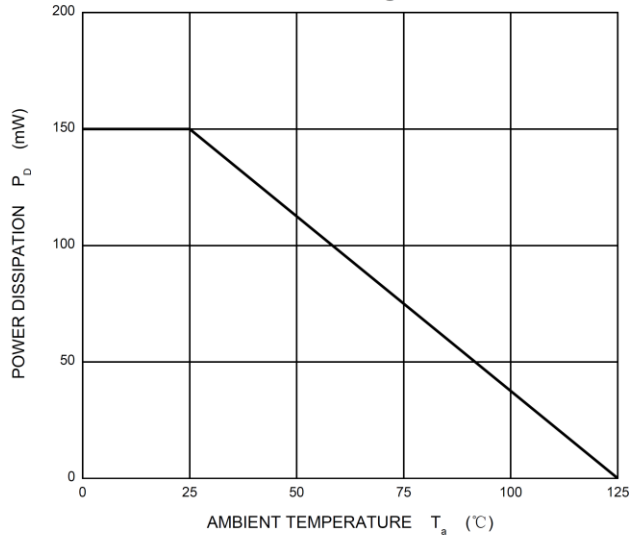
**Reverse Characteristics**



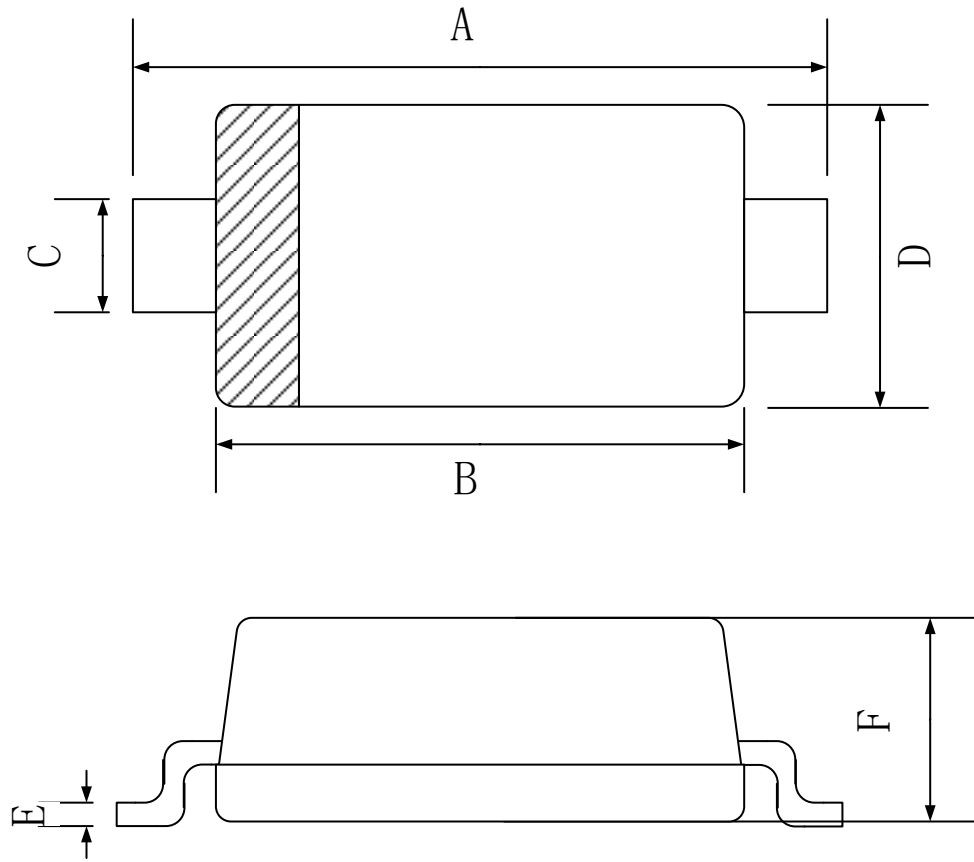
**Capacitance Characteristics Per Diode**



**Power Derating Curve**



## SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	3.45	3.65	3.85
B	2.55	2.65	2.75
C	0.45	0.55	0.65
D	1.50	1.60	1.70
E	0.09	0.105	0.12
F	0.95	1.15	1.35