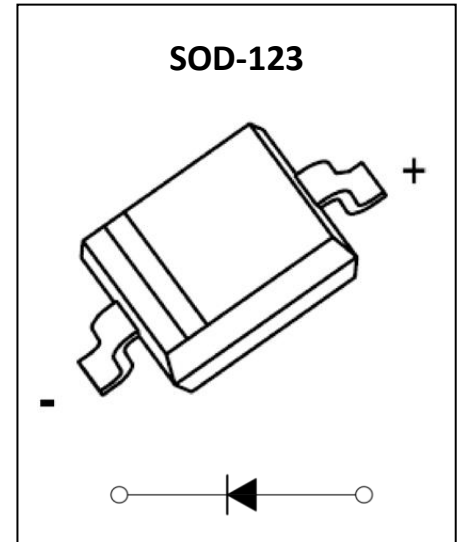


**BAT54W Schottky Barrier Diode**
**Feature**

- Extremely Fast Switch Speed
- Low Forward Voltage

**MARKING:**

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

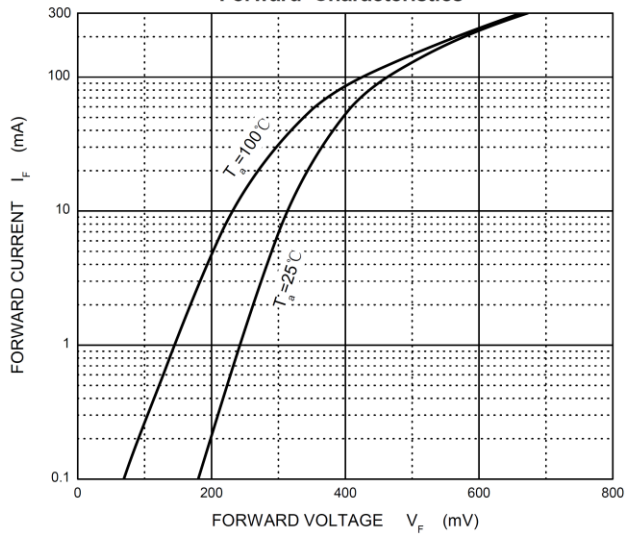
Parameter	Symbol	Value	Unit
DC Reverse Voltage	V <sub>R</sub>	30	V
Average Rectified Output Current	I <sub>O</sub>	0.1	A
Forward Continuous Current	I <sub>F</sub>	0.2	A
Non-Repetitive Peak Forward Surge Current @ T=8.3ms	I <sub>FSM</sub>	0.6	A
Power Dissipation	P <sub>D</sub>	0.15	W
Thermal Resistance 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)**

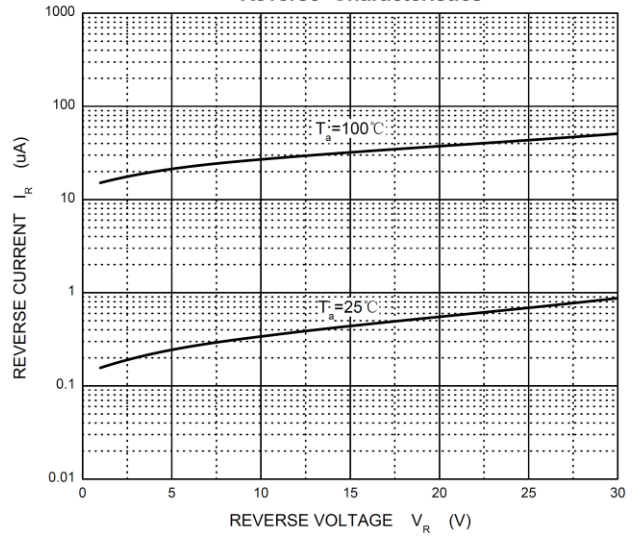
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =100μA	30			V
Forward Voltage	V <sub>F1</sub>	I <sub>F</sub> =0.1mA			0.24	V
	V <sub>F2</sub>	I <sub>F</sub> =1mA			0.32	V
	V <sub>F3</sub>	I <sub>F</sub> =10mA			0.40	V
	V <sub>F4</sub>	I <sub>F</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**

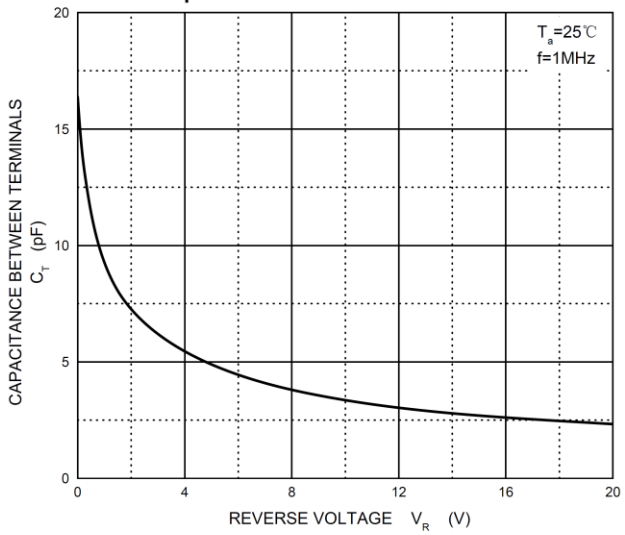
**Forward Characteristics**



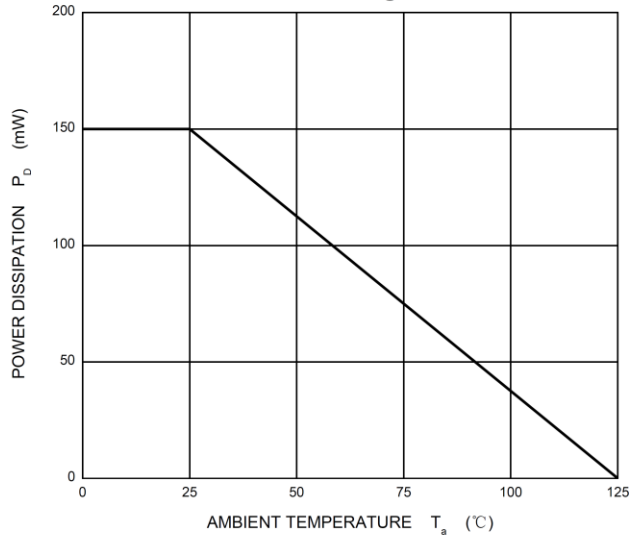
**Reverse Characteristics**

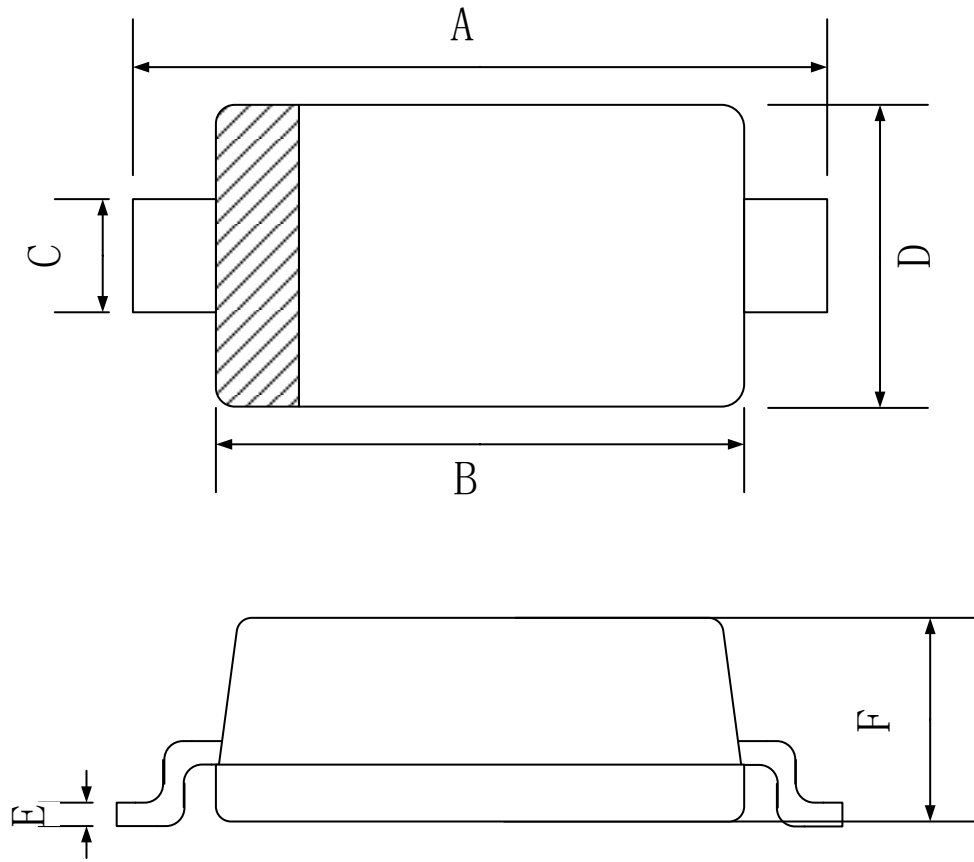


**Capacitance Characteristics Per Diode**



**Power Derating Curve**



**SOD-123 Package Outline Dimensions**


Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	3.45	3.65	3.85
B	2.55	2.65	2.80
C	0.45	0.55	0.65
D	1.50	1.60	1.70
E	0.08	0.105	0.15
F	0.95	1.15	1.35

**Attention:**

- GreenPower Electronics reserves the right to improve product design function and reliability without notice.
- Any and all semiconductor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customer are solely responsible for providing adequate safe measures when design their systems.
- GreenPower Electronics products belong to consumer electronics or other civilian electronic products.