GP5817W

20V-1A Schottky Barrier Diode

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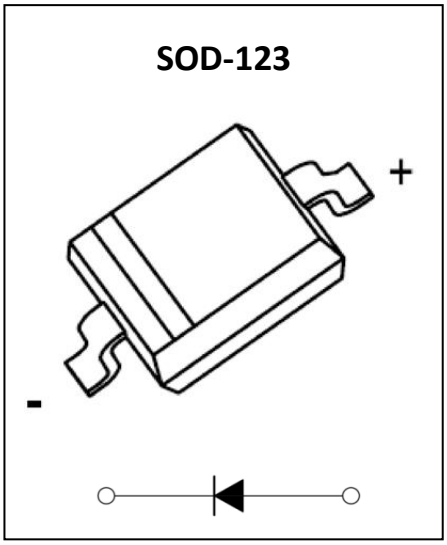


Feature

- Small Power Mold Type
- Low VF
- Low IR
- High Reliability

Application

- High Frequency Inverters
- Free Wheeling
- Polarity Protection Applications

MARKING:

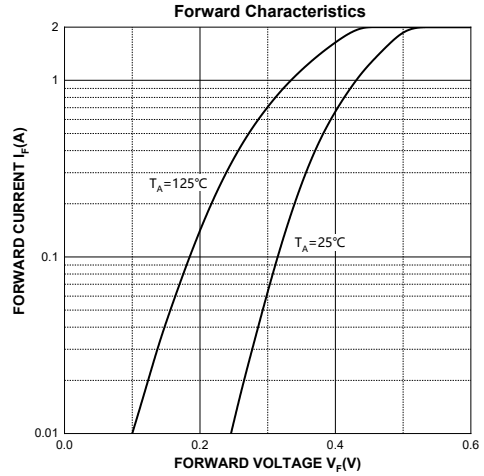
ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

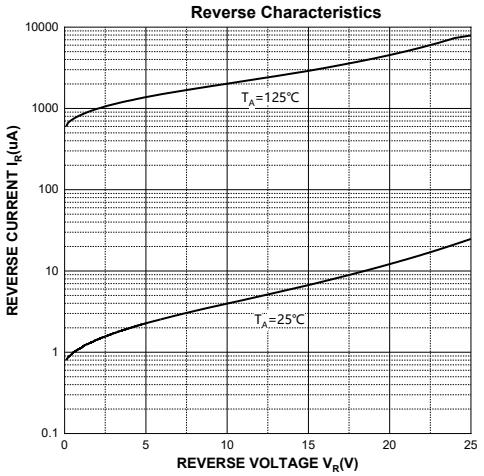
Parameter	Symbol	Value	Unit
DC Reverse Voltage	V_R	20	V
Mean Rectifying Current	I_O	1	A
Non-Repetitive Peak Forward Surge Current @ T=8.3ms	I_{FSM}	15	A
Power Dissipation	P_D	0.35	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	285	℃/W
Junction Temperature	T_J	125	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

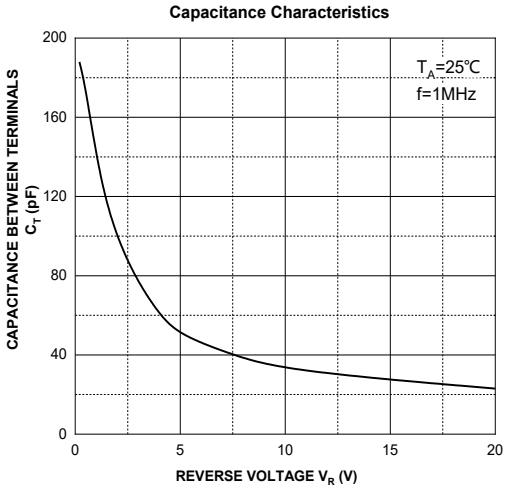
ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

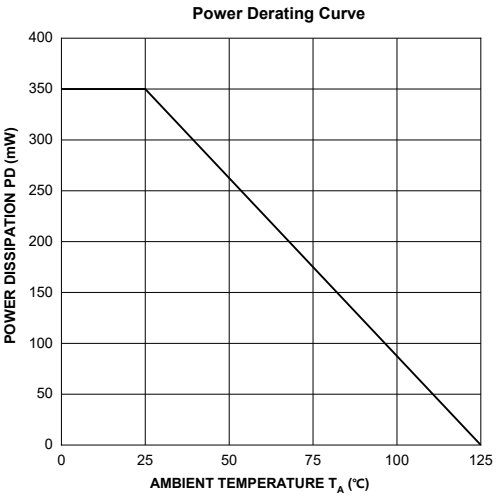
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse Voltage	V_{BR}	I_R =250μA	20			V
Forward Voltage	V_F	I_F =0.5A	0	0.37	0.40	V
		I_F =1.0A	0	0.42	0.45	V
		I_F =3.0A	0	0.62	0.75	V
Reverse Current	I_R	V_R =20V		10	50	μA
Diode Capacitance	C_D	V_R=4V, f=1MHz		60		pF

Typical Electrical and Thermal Characteristics

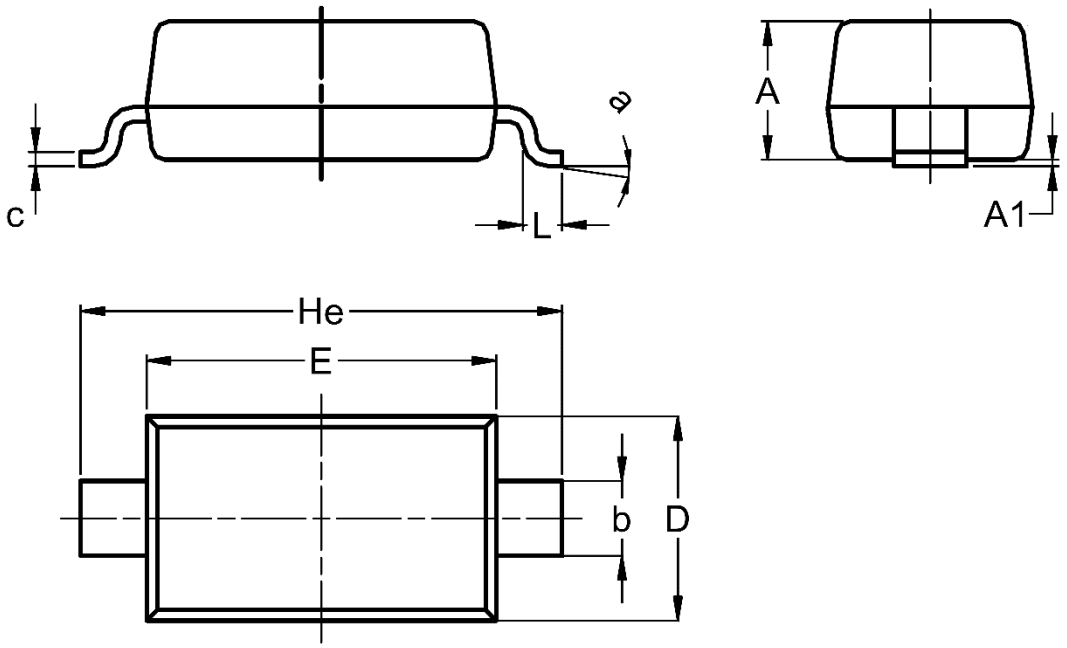








SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.950	1.350	0.037	0.053
A1	0	0.100	0	0.004
c	0.090	0.120	0.004	0.005
D	1.500	1.700	0.059	0.067
b	0.450	0.650	0.018	0.026
He	3.450	3.850	0.136	0.152
E	2.550	2.800	0.100	0.110
L	0.200	0.400	0.008	0.016
a	0°	8°	0°	8°

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. Customers are solely responsible for providing adequate safe measures when design their systems.
- GreenPower Electronics products belong to consumer electronics or other civilian electronic products.