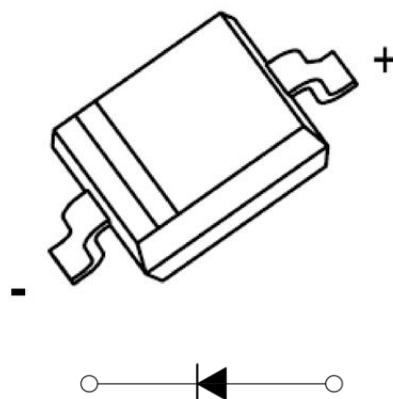


GP5819WS Schottky Barrier Diode
Feature

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

Application

- High Frequency Inverters
- Free Wheeling
- Polarity Protection Applications

SOD-323

MARKING:

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

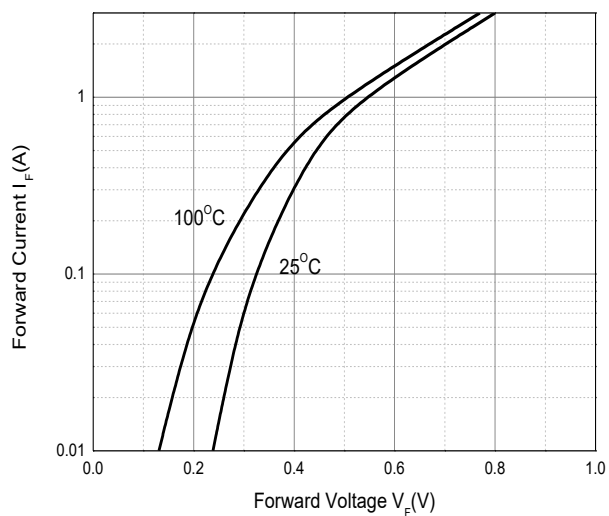
Parameter	Symbol	Value	Unit
DC Reverse Voltage	V _R	40	V
Mean Rectifying Current	I _O	1	A
Non-Repetitive Peak Forward Surge Current @ T=8.3ms	I _{FSM}	15	A
Power Dissipation	P _D	0.25	W
Thermal Resistance from Junction to Ambient	R _{θJA}	400	°C/W
Junction Temperature	T _J	125	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

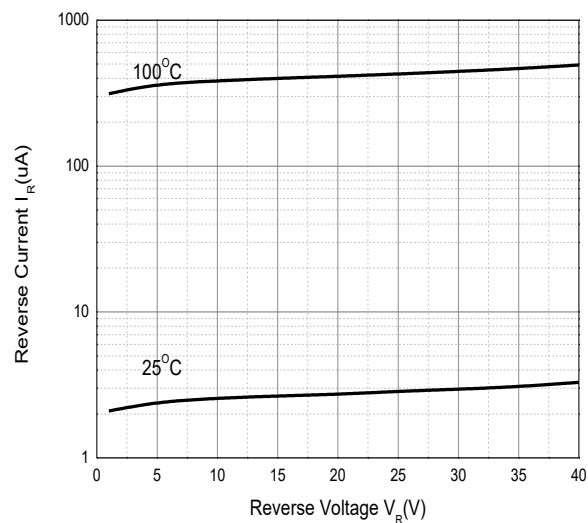
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse Voltage	V _{BR}	I _R = 250μA	40	50		V
Forward Voltage	V _F	I _F = 0.5A	0	0.45	0.50	V
		I _F = 1.0A	0	0.55	0.60	V
		I _F = 3.0A	0	0.80	0.90	V
Reverse Current	I _R	V _R = 40V		5	50	μA
Diode Capacitance	C _D	V _R = 4V, f = 1MHz		50		pF

Typical Characteristics

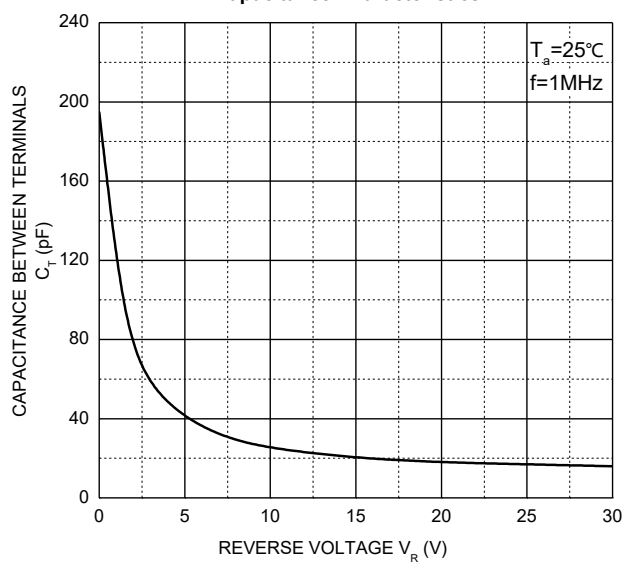
Forward Characteristics



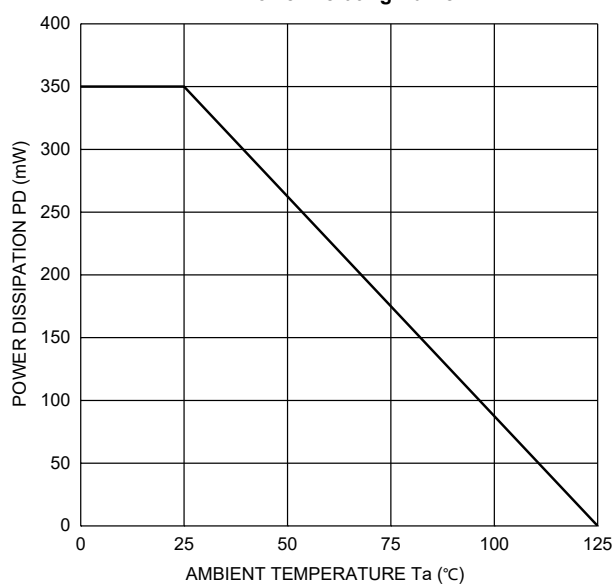
Reverse Characteristics

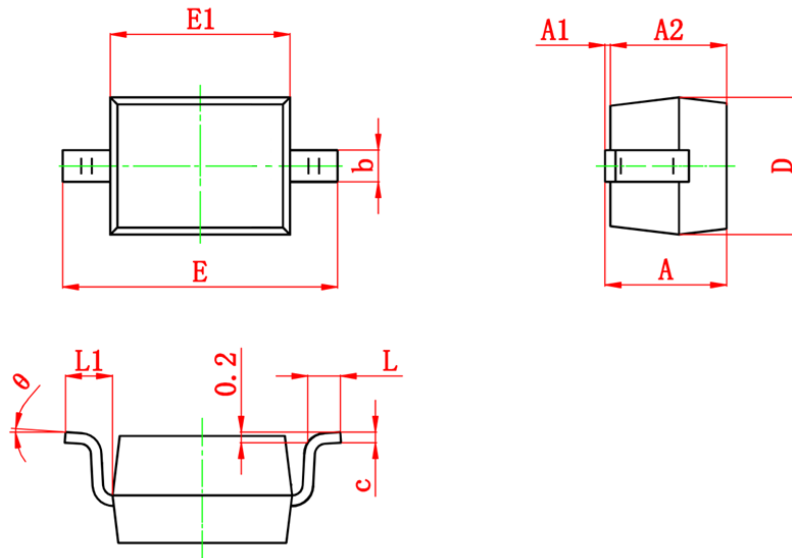


Capacitance Characteristics



Power Derating Curve



SOD-323 Package Outline Dimensions


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.150MAX		0.045MAX	
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.400	0.010	0.016
c	0.080	0.180	0.003	0.007
D	1.200	1.400	0.047	0.055
E	2.500	2.800	0.098	0.110
E1	1.600	1.800	0.063	0.071
L	0.200	0.450	0.008	0.018
L1	0.475REF		0.019REF	
θ	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.