

SP5819BWS Schottky Barrier Diode

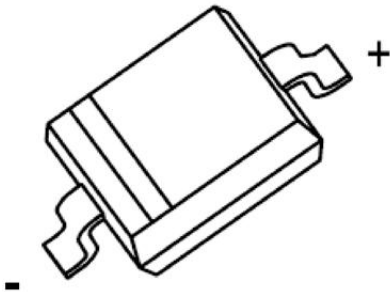
Feature

- Small power mold type
- Low VF
- Low IR
- High reliability

Application

- High frequency inverters
- Free wheeling
- Polarity protection applications

Package:



SOD-323

Circuit diagram



Marking



SP5819BWS

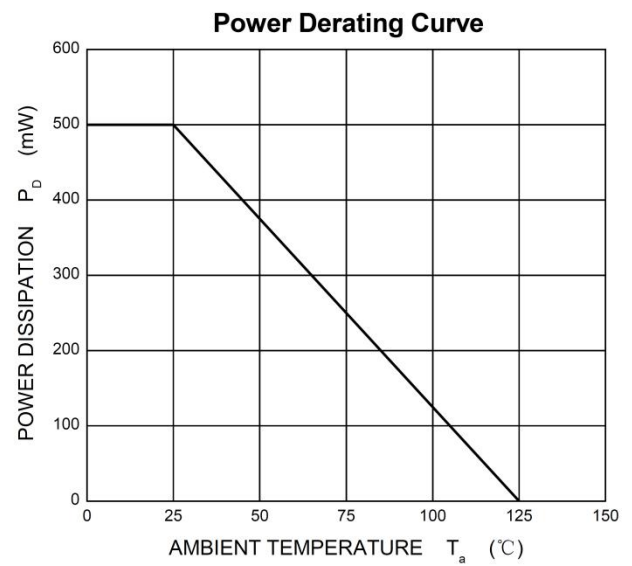
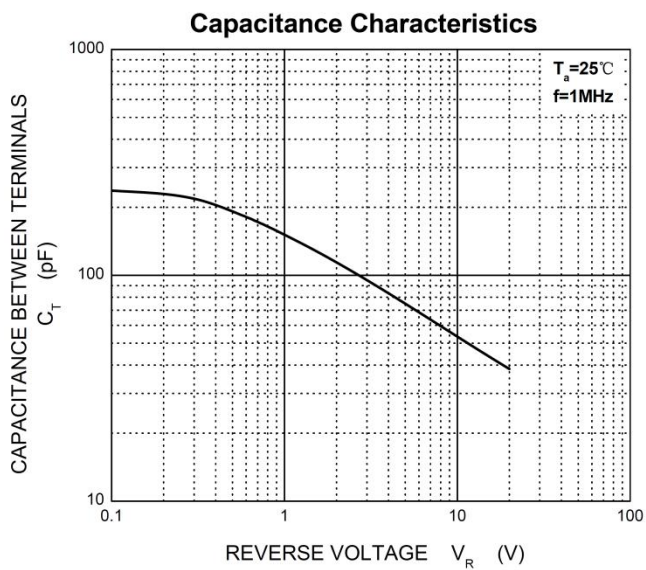
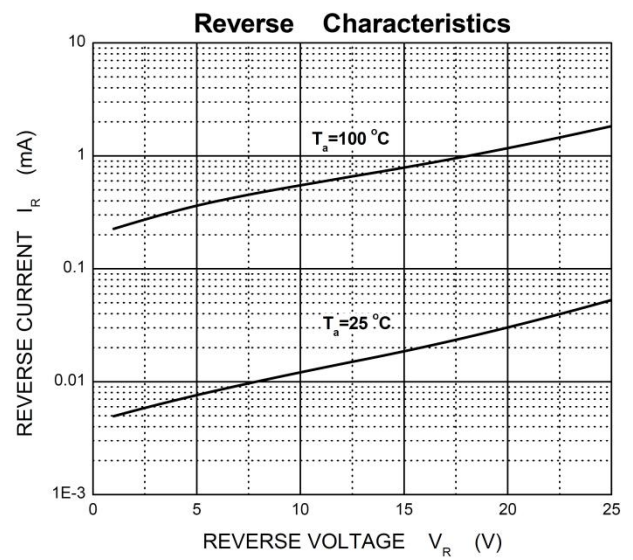
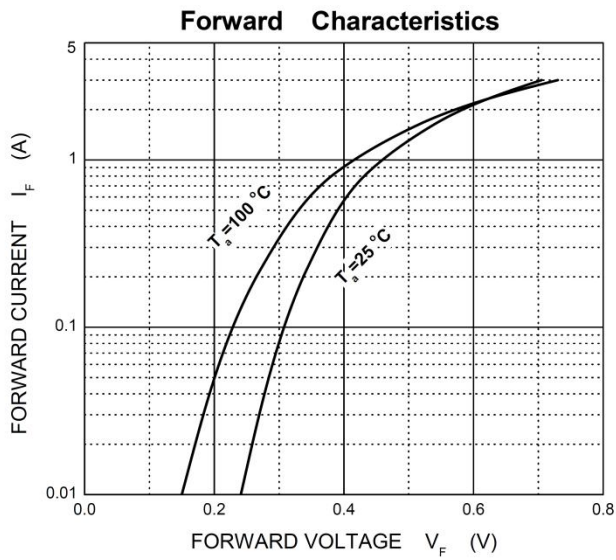
Absolute maximum ratings (Ta=25°C unless otherwise noted)

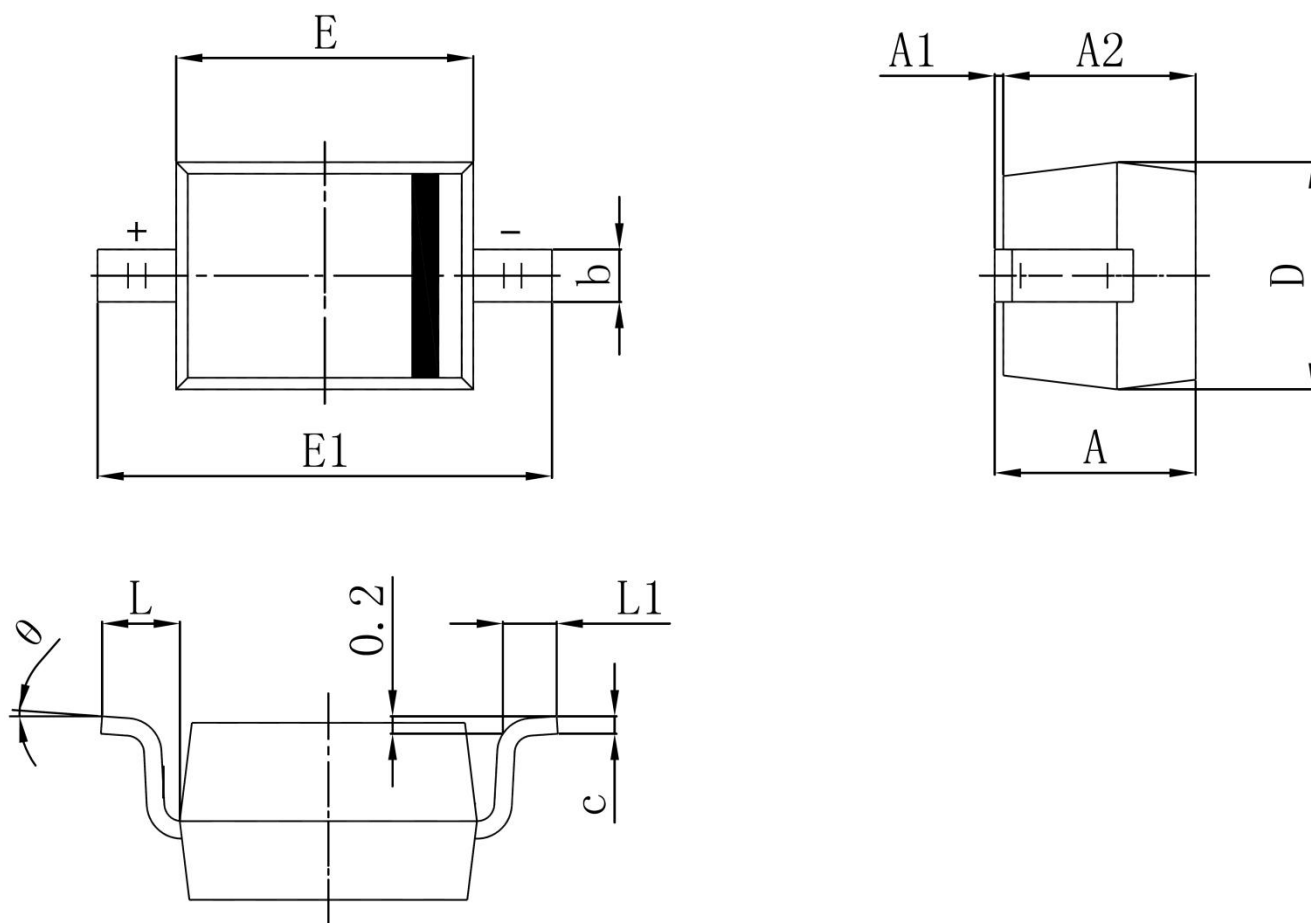
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Mean rectifying current	I_O	1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	9	A
Power Dissipation	P_D	0.5	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	200	°C/W
Junction Temperature	T_J	125	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Electrical characteristics (Ta=25 °C, unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse voltage	V_{BR}	$I_R = 1mA$	40			V
Forward voltage	V_F	$I_F = 1A$ $I_F = 3A$			0.6 0.9	V
Reverse current	I_R	$V_R = 40V$			1	mA
Diode capacitance	C_D	$V_R = 4V, f = 1MHz$			120	pF

Typical Characteristics



SOD-323 Package Information


S ymbol	D imensions In Millimeters	
	Min.	Max.
A		1.000
A 1	0.000	0.100
A 2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E 1	2.500	2.750
L	0.475 RE F.	
L1	0.250	0.400
θ	0°	8°