SP5819BW Schottky Barrier Diode

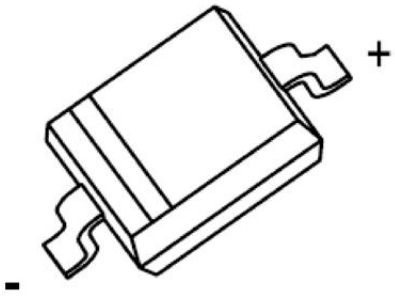
Feature

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

Application

- High frequency inverters
- Free wheeling
- Polarity protection applications

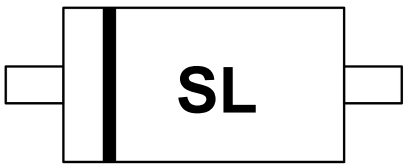
Package:



SOD-123

Circuit diagram

Marking



Absolute maximum ratings (Ta=25℃ unless otherwise noted)

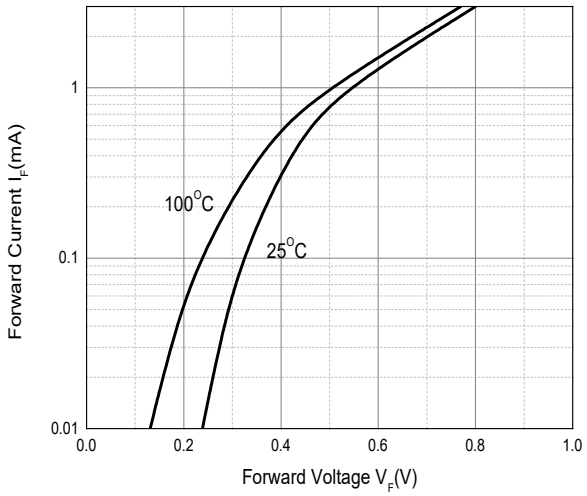
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	9	A
Power Dissipation	P_D	0.25	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	400	℃/W
Junction Temperature	T_J	125	℃
Storage Temperature	T_{STG}	-55 ~ +150	℃

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

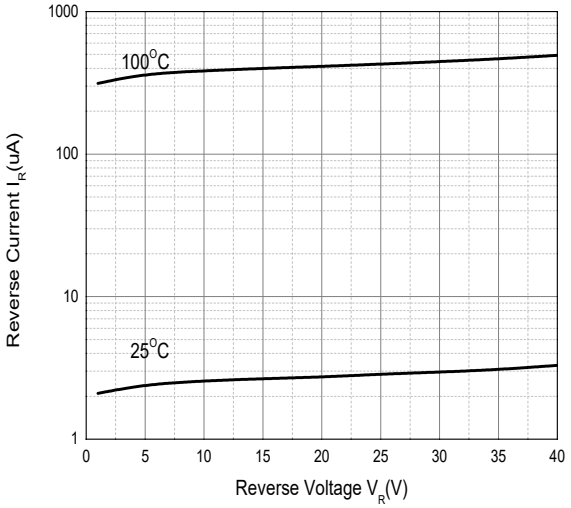
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse voltage	V_{BR}	I_R =1mA	40	50		V
Forward voltage	V_F	I_F =1.0A			0.60	V
		I_F =3.0A			0.95	
Reverse current	I_R	V_R =40V			1	mA
Diode capacitance	C_D	V_R=4V, f=1MHz			120	pF

Typical Characteristics

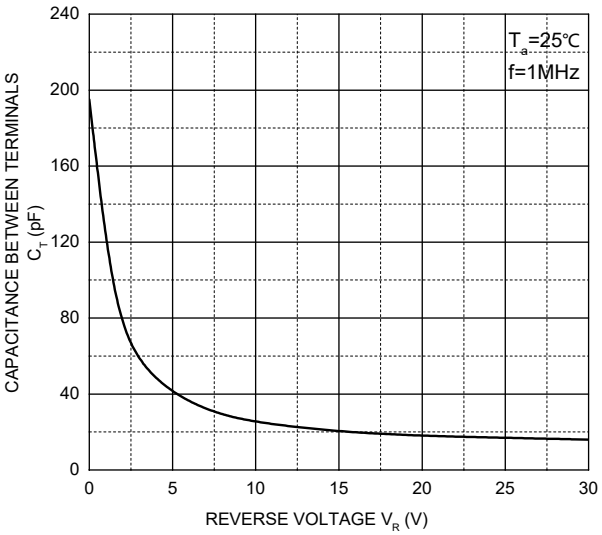
Forward Characteristics



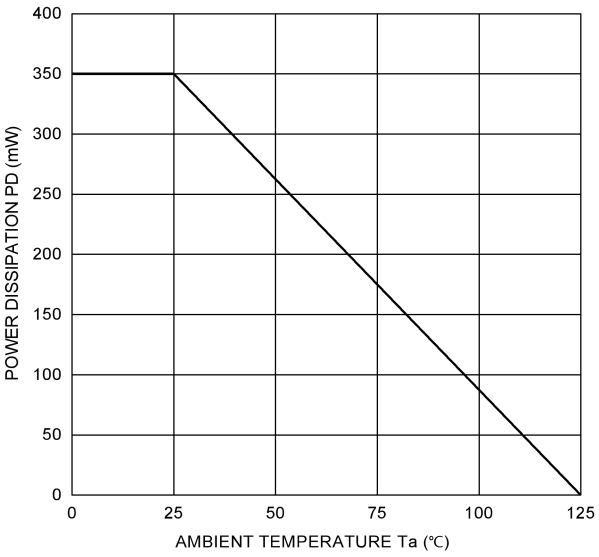
Reverse Characteristics



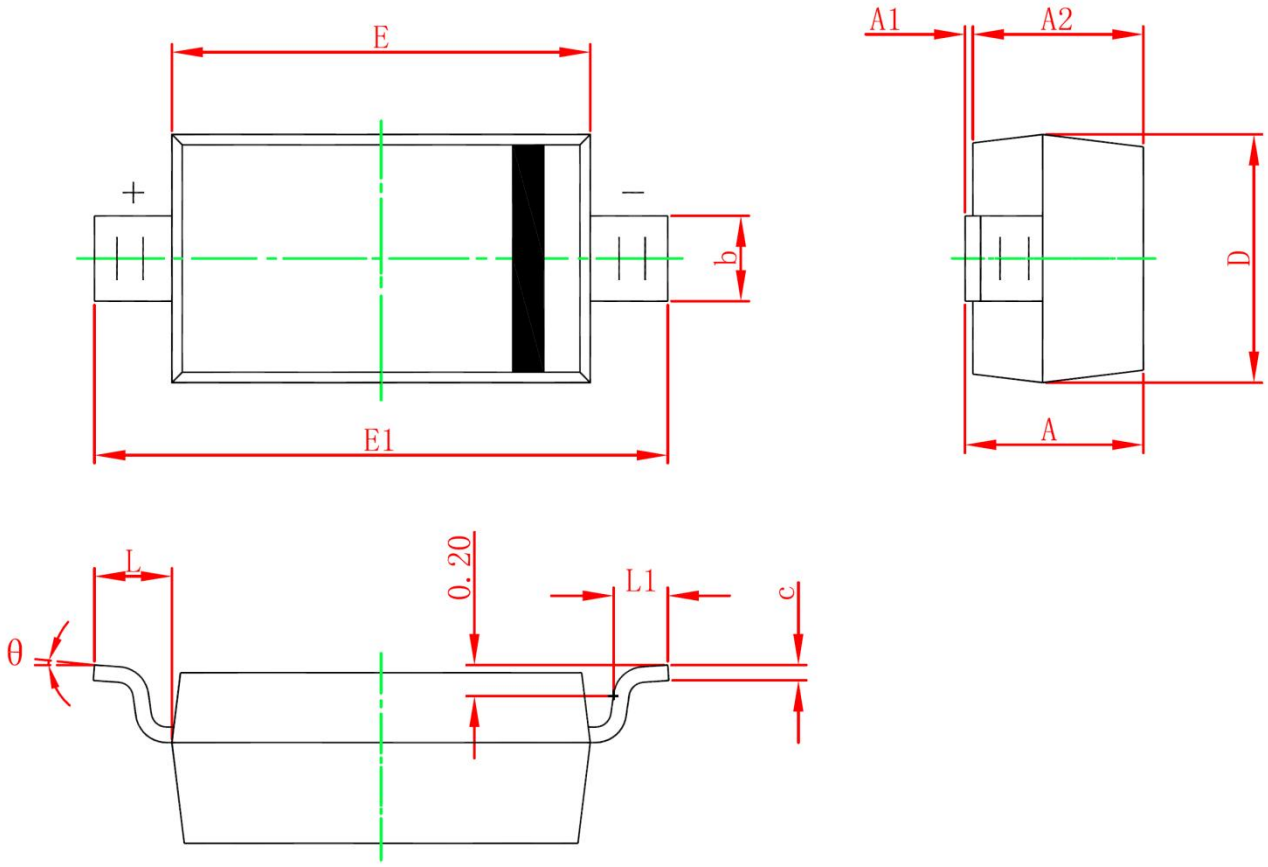
Capacitance Characteristics



Power Derating Curve



SOD-123 Package Information



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500 REF.	
L1	0.250	0.450
θ	0°	8°