



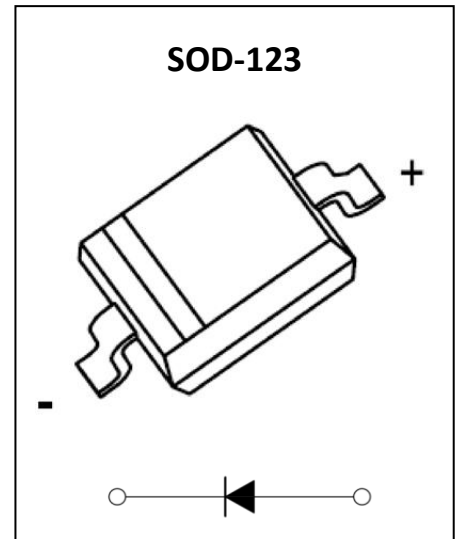
GP5817W Schottky Barrier Diode

Feature

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

Application

- High frequency inverters
- Free wheeling
- Polarity protection applications



MARKING:



ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

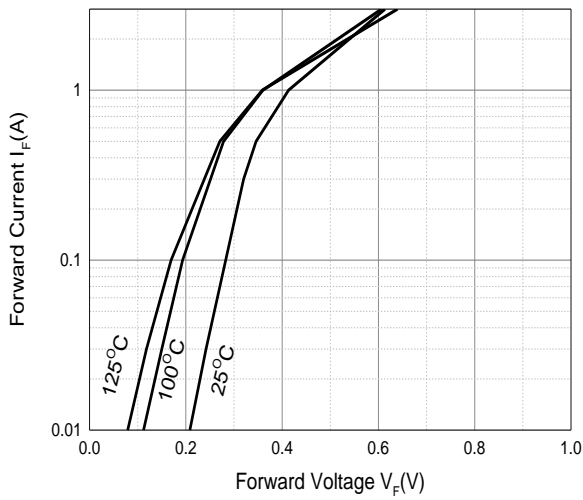
Parameter	Symbol	Value	Unit
DC reverse voltage	V_R	20	V
Mean rectifying current	I_o	1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	15	A
Power Dissipation	P_D	0.35	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	285	$^\circ\text{C/W}$
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

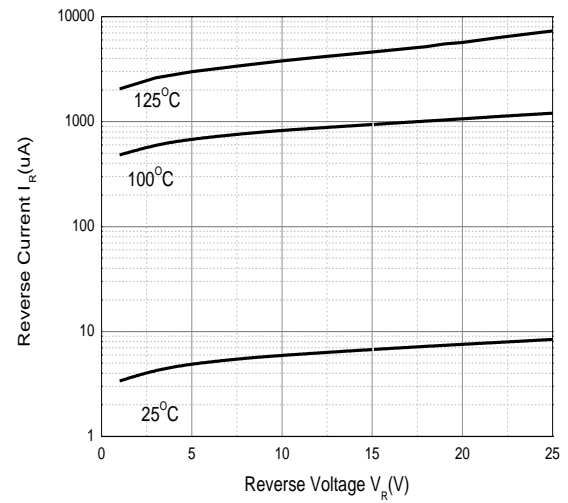
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	V_{BR}	$I_R = 250\mu\text{A}$	20			V
Forward voltage	V_F	$I_F = 0.5\text{A}$	0	0.37	0.40	V
		$I_F = 1.0\text{A}$	0	0.42	0.45	V
		$I_F = 3.0\text{A}$	0	0.62	0.75	V
Reverse current	I_R	$V_R = 20\text{V}$		5	50	μA
Diode capacitance	C_D	$V_R = 4\text{V}, f = 1\text{MHz}$		60		pF

Typical Electrical and Thermal Characteristics

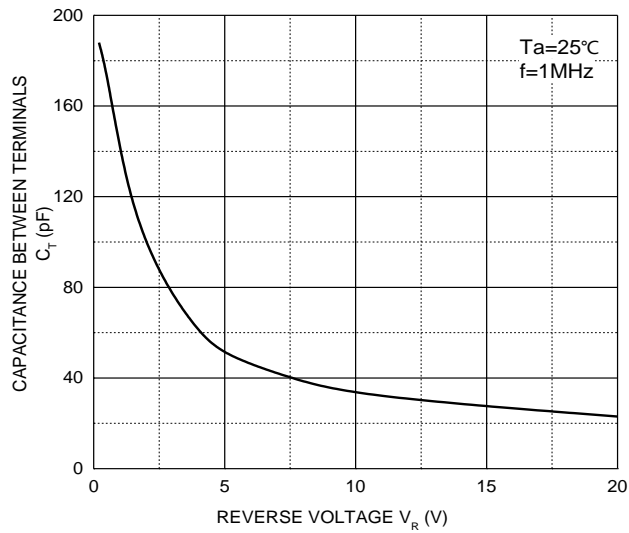
Forward Characteristics



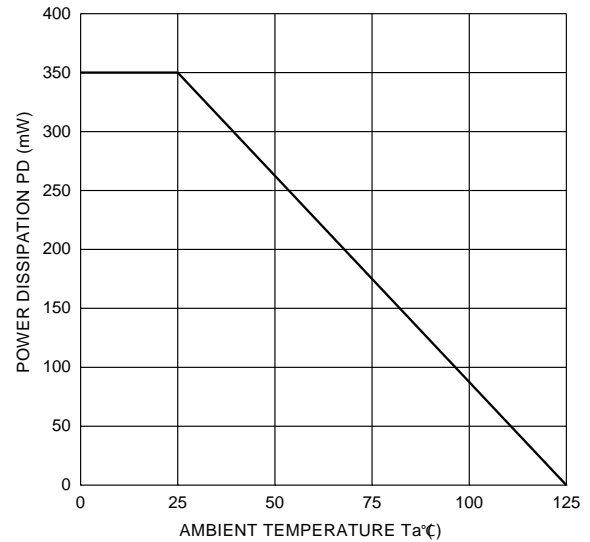
Reverse Characteristics

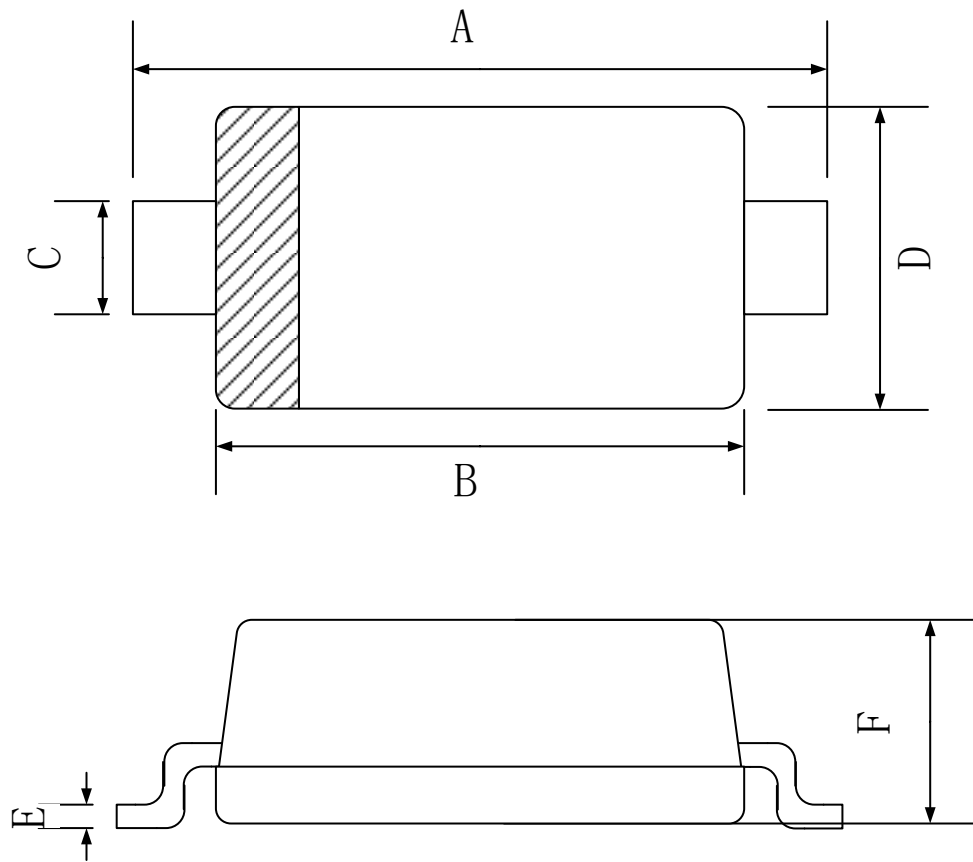


Capacitance Characteristics



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	2.75
C	0.45	0.55	0.65
D	1.50	1.60	1.70
E	0.09	0.105	0.12
F	0.95	1.15	1.35