

GP5819W Schottky Barrier Diode

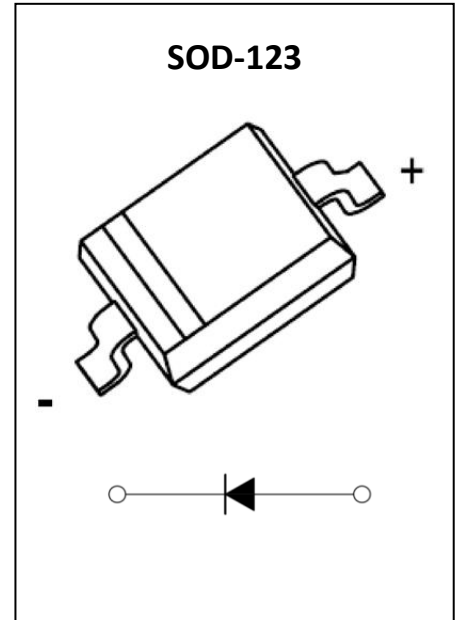
Feature

- 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°C unless otherwise noted)

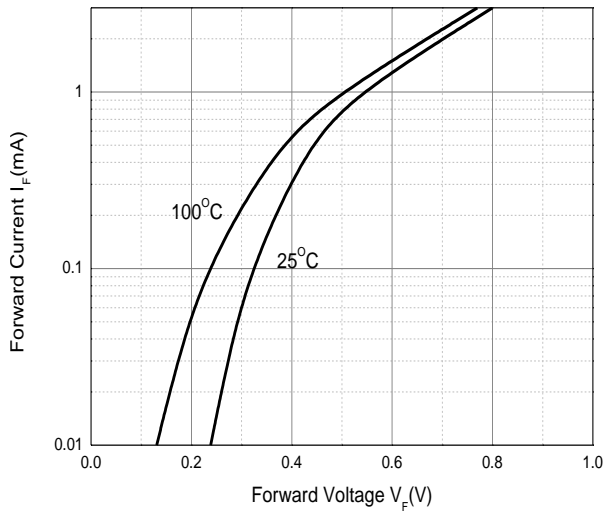
Parameter	Symbol	Value	Unit
DC reverse voltage	V _R	40	V
Mean rectifying current	I _o	1	A
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I _{FSM}	15	A
Power Dissipation	P _D	0.35	W
Thermal Resistance from Junction to Ambient	R _{θJA}	285	°C/W
Junction Temperature	T _J	125	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C

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

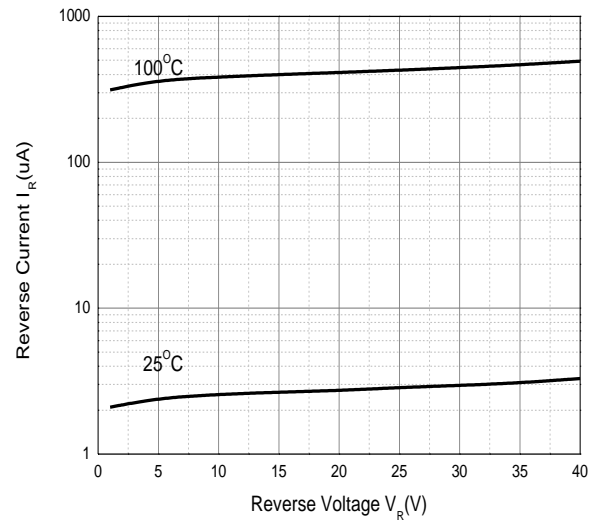
Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse voltage	V _{BR}	I _R =250μA	40	50		V
Forward voltage	V _F	I _F =0.5A	0	0.45	0.50	V
		I _F =1.0A	0	0.55	0.60	V
		I _F =3.0A	0	0.80	0.90	V
Reverse current	I _R	V _R =40V		5	50	μA
Diode capacitance	C _D	V _R =4V, f=1MHz		50		pF

Typical Characteristics

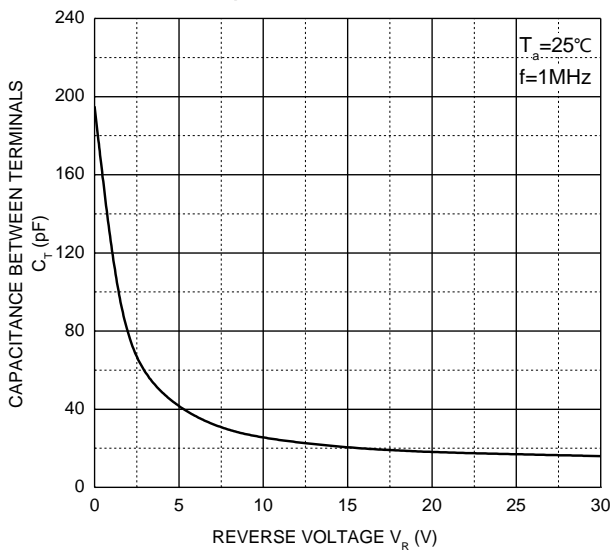
Forward Characteristics



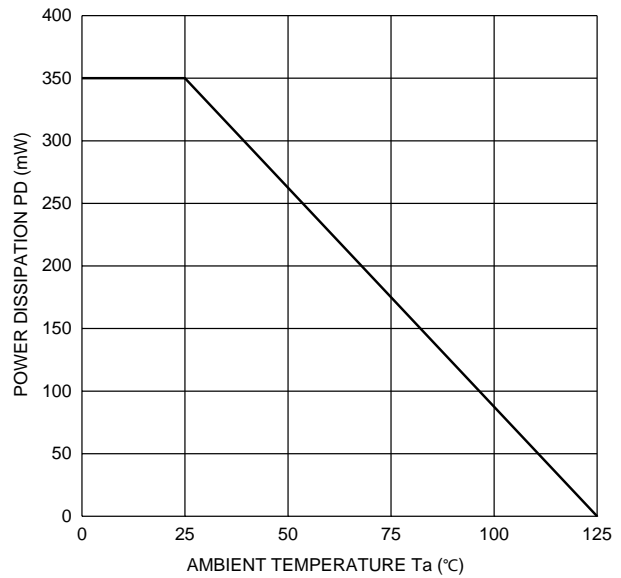
Reverse Characteristics

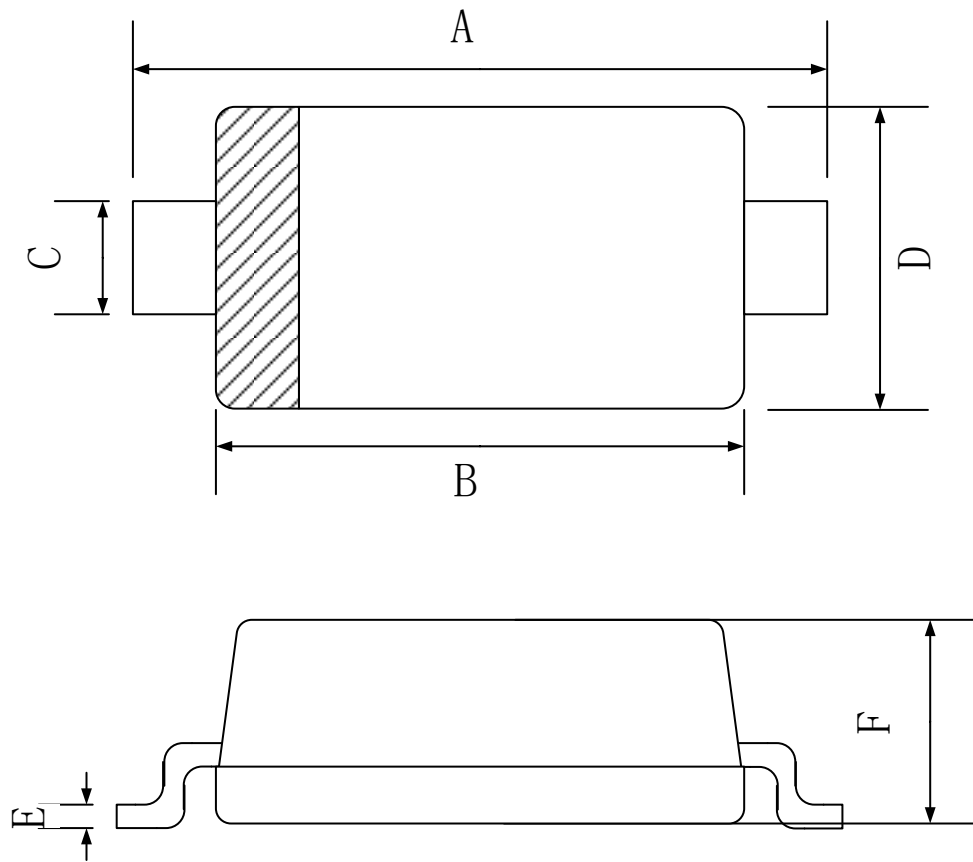


Capacitance Characteristics



Power Derating Curve



SOD-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