

B5819WS

DATASHEET

Specification Revision History:

Version	Date	Description
V1.0	2021/07	New
V1.1	2023/09	Modify Ordering Information
V1.2	2024/02	Modify Ordering Information
V1.3	2025/05	Add application precautions and overall typesetting.

Features

- ※ Low Forward Voltage Schottky Rectifier.
- ※ High Frequency Inverters.

The appearance of the product



SOD-323



Equivalent Circuit

Ordering Information

Product Model	Package Type	Marking	Packing	Packing Qty
B5819WS-GM	SOD-323	SL	REEL	3000PCS/REEL

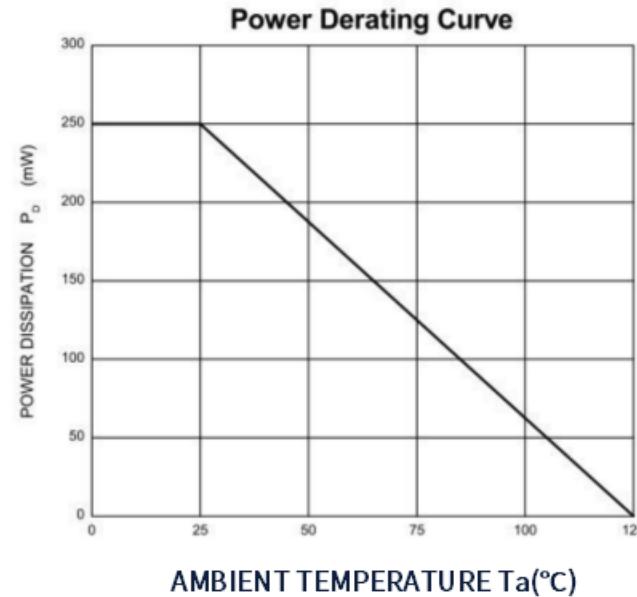
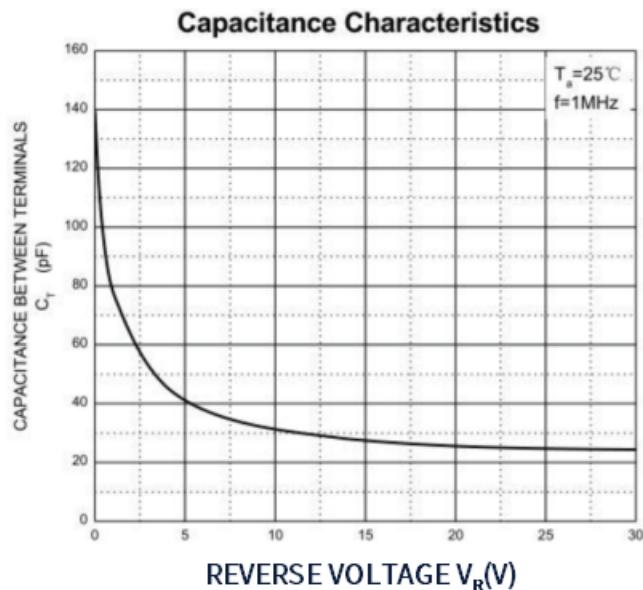
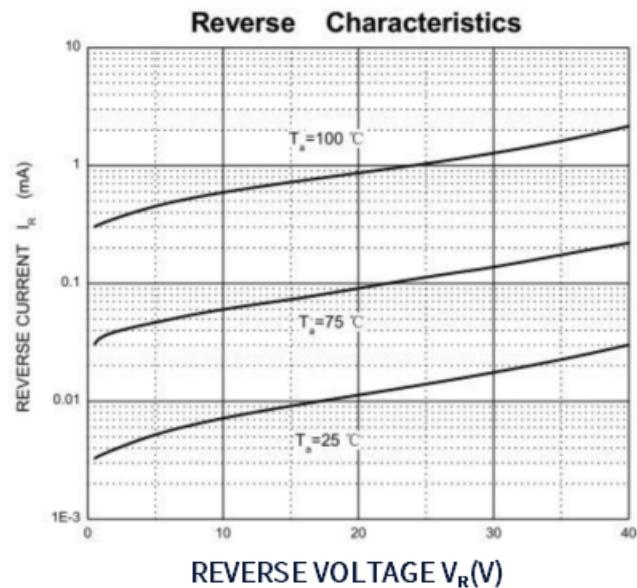
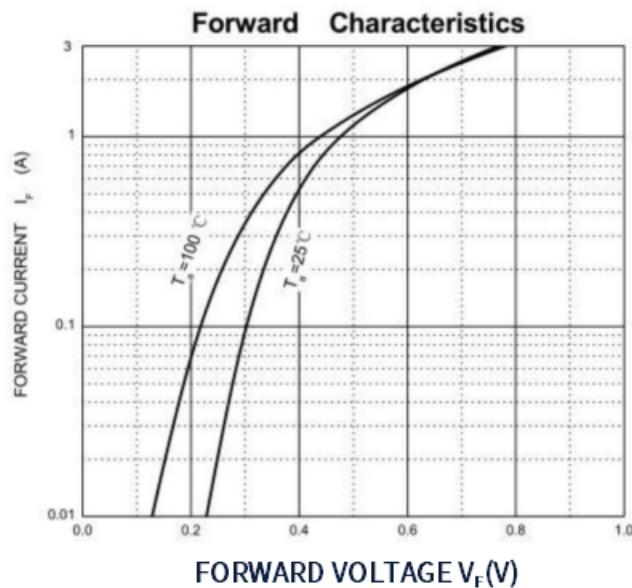
Absolute Maximum Ratings(TA=25°C)

Symbol	Parameter	Value	Unit
V_{RM}	Non-repetitive Peak Reverse Voltage		
V_{RRM}	Peak Repetitive Peak Reverse Voltage		
V_{RWM}	Working Peak Reverse Voltage	40	V
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_o	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	9	A
I_{FRM}	Repetitive Peak Forward Current	1.5	A
P_d	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	400	°C/W
T_J	Operation Junction Temperature Range	-40~+125	°C
T_{STG}	Storage Temperature Range	-55~+150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=1\text{mA}$	40			V
I_R	Reverse voltage leakage current	$V_R=40\text{V}$			1	mA
$V_{F(1)}$	Forward voltage(1)	$I_F=1\text{A}$			0.5	V
$V_{F(2)}$	Forward voltage(2)	$I_F=3\text{A}$			0.9	V
C_D	Diode capacitance	$V_R=4\text{V}, f=1.0\text{MHz}$			120	pF

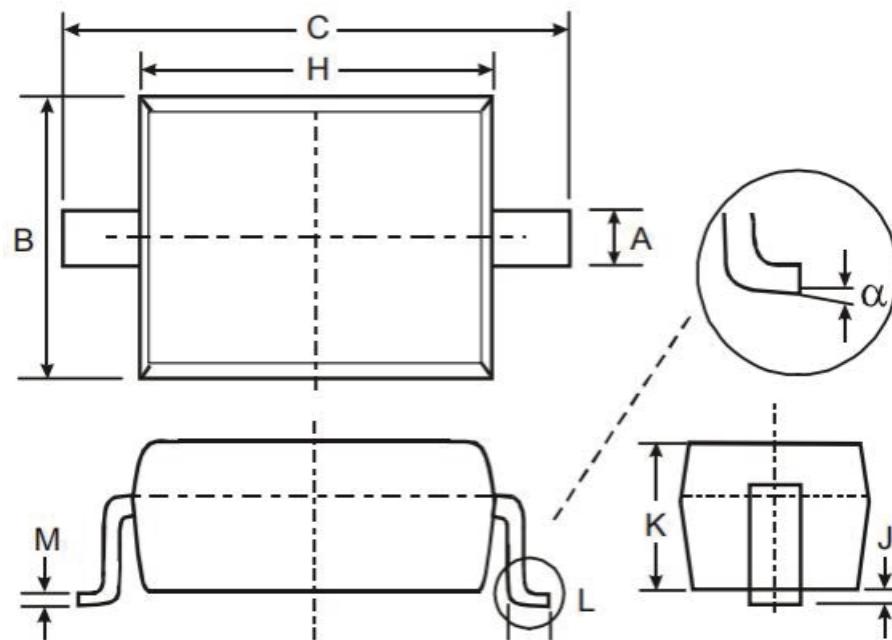
Typical Characteristics



Outline Dimensions 封装外形图

SOD-323

Unit : mm



SYMBOL	MILLIMETERS	
	MIN	MAX
A	0.25	0.35
B	1.20	1.40
C	2.40	2.70
H	1.60	1.80
J	0.01	0.15
K	0.80	1.00
L	0.20	0.40
M	0.08	0.15
α	0°	8°

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