

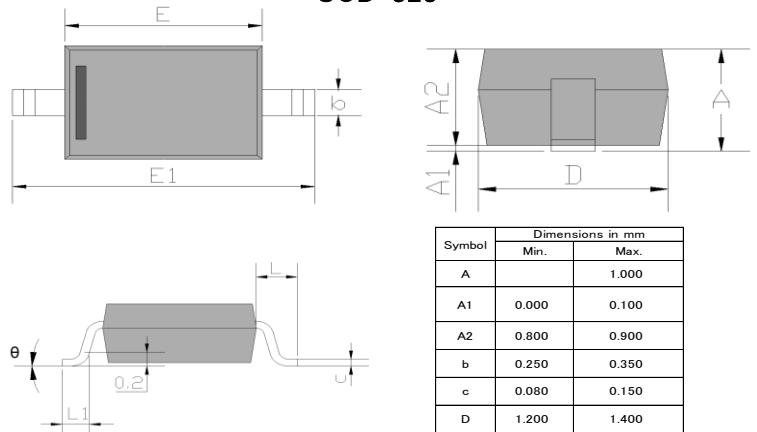
**B5819WS**

Schottky Diode

SOD-323

Features

Low Forward Voltage Schottky Rectifier
High Frequency Inverters
Rohs Compliant / Green Emc
SOD323 Thin Smd Package
Matte Tin (Sn) Lead Finish
Cathode Band / Device Marking
AEC-Q101 Compliant



Symbol	Dimensions in mm	
	Min.	Max.
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475 REF.	
L1	0.250	0.400
θ	0°	8°

Maximum Ratings (Ta = 25 °C)

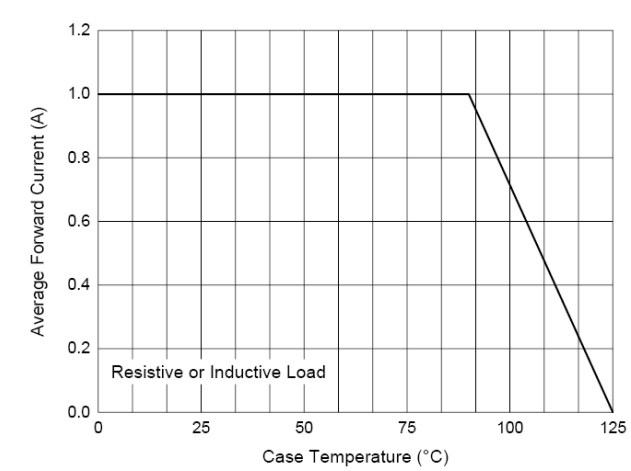
Symbol	Parameter	B5819WX-AEC	Units
V_{RM}	Non-Repetitive Peak Reverse Voltage	40	V
V_{RRM}	Repetitive Peak Reverse Voltage	40	V
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-Repetitive Peak Forward Surge Current @8.3mS	10	A
P_D	Power Dissipation	200	mW
T_J	Junction Temperature	125	°C
T_{STG}	Storage Temperature	-55 to +125	°C

*1 8.3 ms single half sine-wave

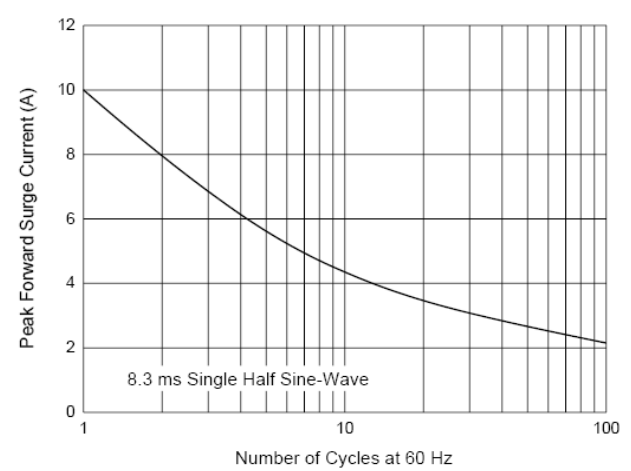
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
V_F	Forward Voltage	$I_F=1A$			0.60	V
		$I_F=3A$			0.90	V
I_R	Reverse Current	$V_R=40V$			1	mA
		$V_R=40V, T_J=100^{\circ}C$			10	
C_J	Typical Junction Capacitance	$V_R=10V, 1.0MHz$			32	pF

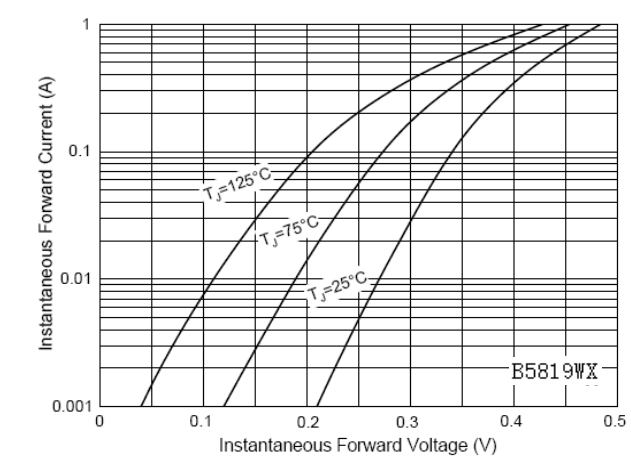
Rating and Characteristic Curves ($T_A = 25^{\circ}\text{C}$ Unless otherwise noted)
B5819WS



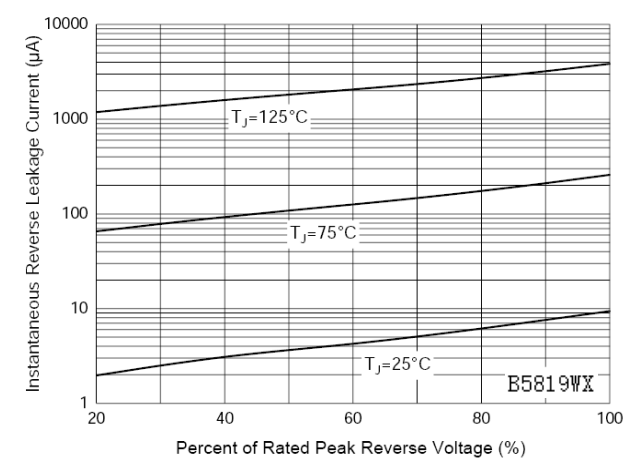
Forward Current Derating Curve



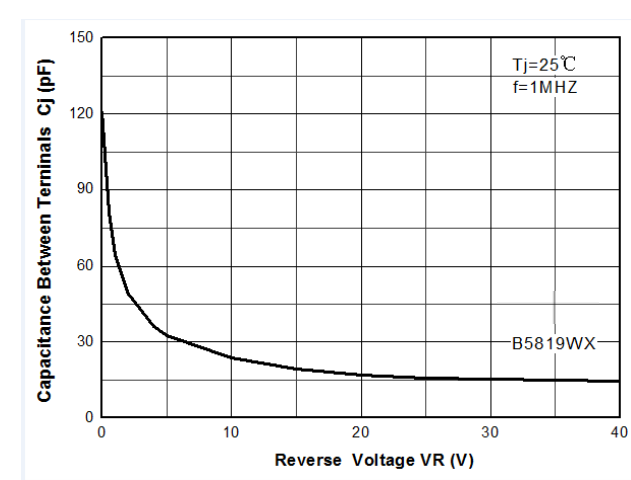
Maximum Non-Repetitive Peak
 Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics



Capacitance Characteristics