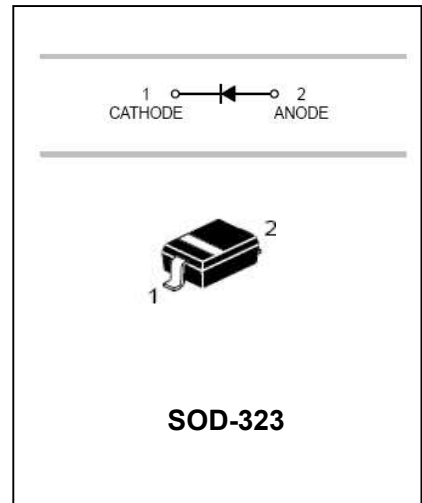


## Schottky Barrier Diode

## B5818WS-B5819WS

### FEATURES

- Extremely low  $V_F$  .
- Low stored charge, majority carrier conduction
- Low power loss/high efficient.
- MSL 1.



### APPLICATIONS

- For Use In Low Voltage, High Frequency Inverters.
- Free Wheeling, And Polarity Protection Applications.

### ORDERING INFORMATION

Type No.	Marking	Package Code
B5818WS	SK	SOD-323
B5819WS	SL	SOD-323

### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	symbol	B5818WS	B5819WS	Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	36	48	V
Peak repetitive Peak reverse voltage	$V_{RRM}$	30	40	V
Working Peak Reverse voltage	$V_{RWM}$			
DC Reverse Voltage	$V_R$			
RMS Reverse Voltage	$V_{R(RMS)}$	21	28	V
Average Rectified output Current	$I_o$	1		A
Peak forward surge current@=8.3ms	$I_{FSM}$	10		A
Power Dissipation	$P_d$	235		mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	80		$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150		$^\circ\text{C}$

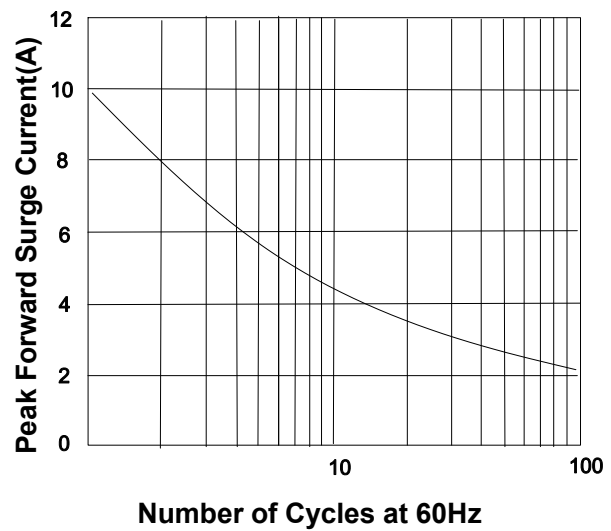
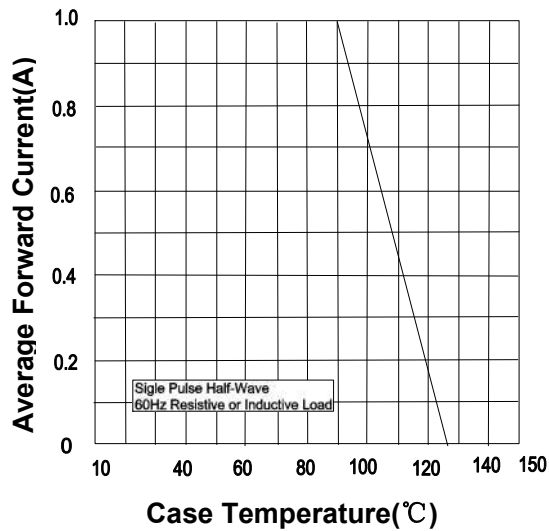
## Schottky Barrier Diode

## B5818WS-B5819WS

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

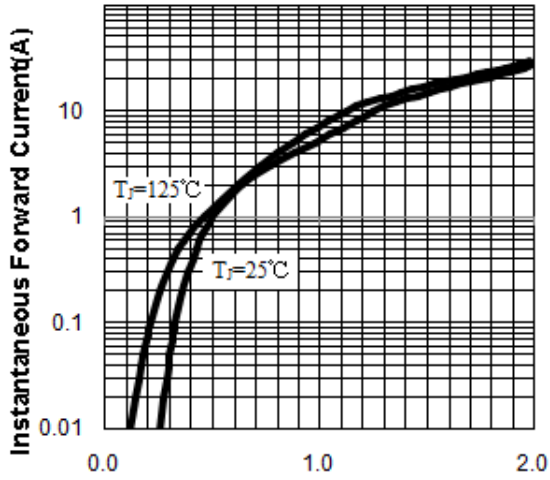
Parameter	Symbol	Test Condition	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$	B5818WS	30	V
			B5819WS	40	
Reverse voltage leakage current	$I_R$	$V_R=30V$ $V_R=40V$	B5818WS B5819WS	1	mA
Forward voltage	$V_F$	B5818WS	$I_F=1A$	0.55	V
			$I_F=3A$	0.875	
		B5819WS	$I_F=1A$	0.6	V
			$I_F=3A$	0.9	
Diode capacitance	$C_D$	$V_R=4V, f=1MHz$		120	pF

### TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

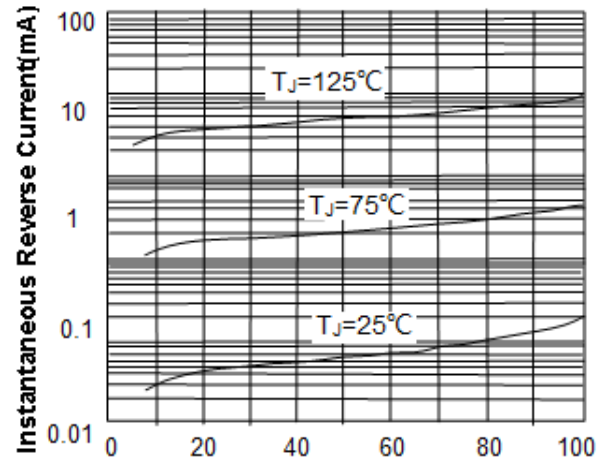


## Schottky Barrier Diode

## B5818WS-B5819WS



**Fig.3 Typical Instantaneous Forward Characteristics**

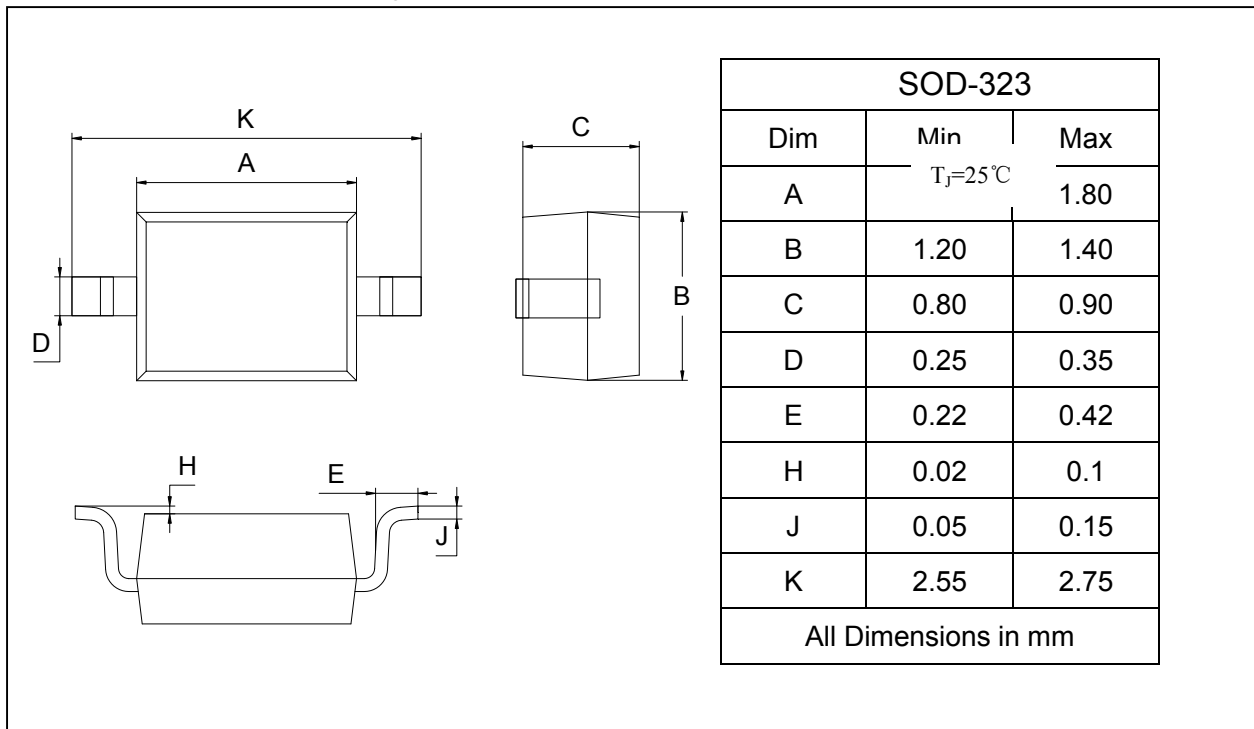


**Fig.4 Typical Reverse Characteristics**

## PACKAGE OUTLINE

Plastic surface mounted package

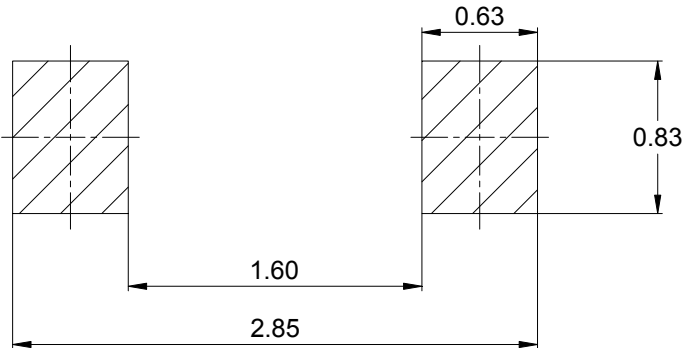
SOD-323



## Schottky Barrier Diode

## B5818WS-B5819WS

### SOLDERING FOOTPRINT



Unit : mm

### PACKAGE INFORMATION

Device	Package	Shipping
B5818WS-B5819WS	SOD-323	3000/Tape&Reel