



# B5817WS-B5819WS

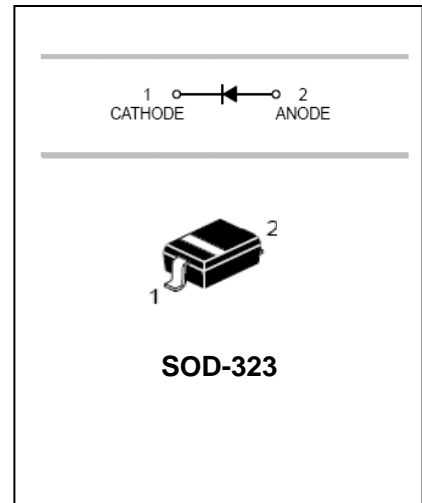
## Schottky Barrier Diode

### FEATURES

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



Lead-free



### APPLICATIONS

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

### ORDERING INFORMATION

Type No.	Marking	Package Code
B5817WS	SJ	SOD-323
B5818WS	SK	SOD-323
B5819WS	SL	SOD-323

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	symbol	B5817WS	B5818WS	B5819WS	Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	20	30	40	V
Peak repetitive Peak reverse voltage	$V_{RRM}$	20	30	40	V
Working Peak Reverse voltage	$V_{RWM}$				
DC Reverse Voltage	$V_R$				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified output Current	$I_o$	1			A
Peak forward surge current@=8.3ms	$I_{FSM}$	20			A
Power Dissipation	$P_d$	235			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	426			°C/W
Storage temperature	$T_{STG}$	-55 to +150			°C



# B5817WS-B5819WS

## Schottky Barrier Diode

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

Parameter	Symbol	Test Condition	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$			V
		B5817WS	20		
		B5818WS	30		
Reverse voltage leakage current	$I_R$	$V_R=20V$	B5817WS		mA
		$V_R=30V$	B5818WS	1	
		$V_R=40V$	B5819WS		
Forward voltage	$V_F$	B5817WS	$I_F=1A$		0.45
			$I_F=3A$		0.75
		B5818WS	$I_F=1A$		0.55
			$I_F=3A$		0.875
		B5819WS	$I_F=1A$		0.6
			$I_F=3A$		0.9
Diode capacitance	$C_D$	$V_R=4V, f=1MHz$		120	pF

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

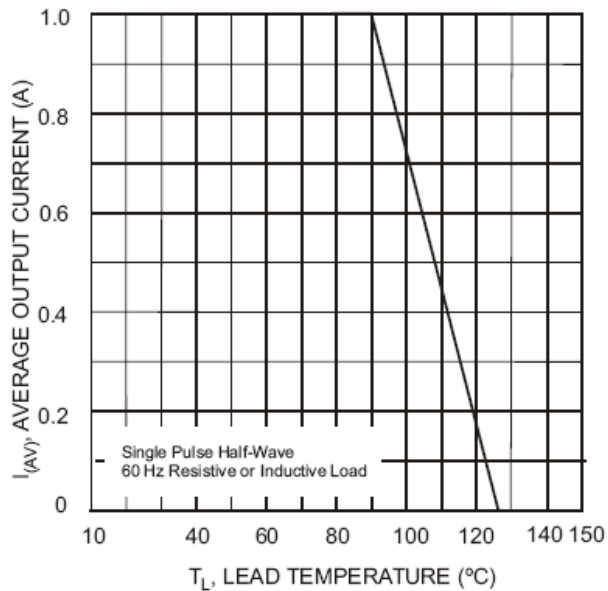


Fig. 1 Forward Current Derating Curve

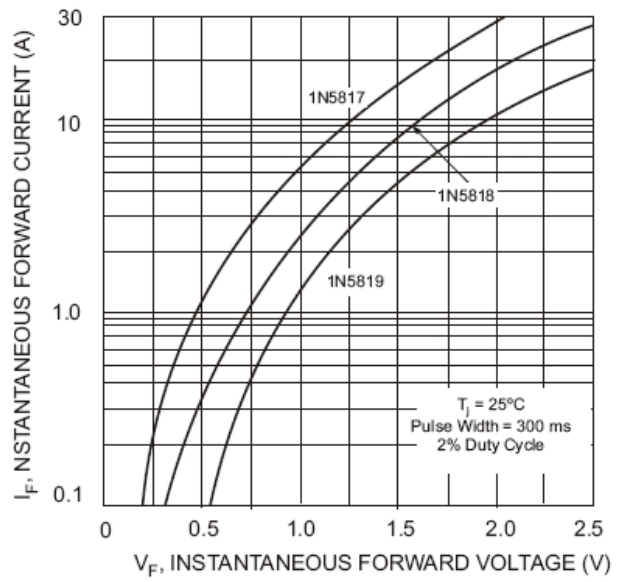


Fig. 2 Typical Forward Characteristics



Schottky Barrier Diode

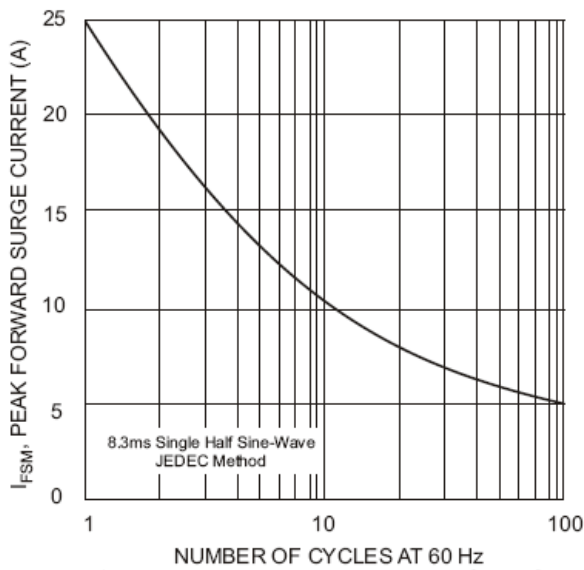


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

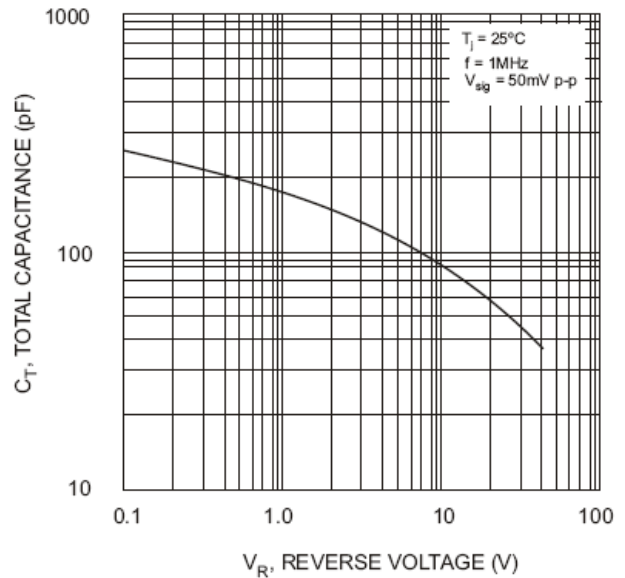


Fig. 4 Typical Total Capacitance

PACKAGE OUTLINE

Plastic surface mounted package

SOD-323

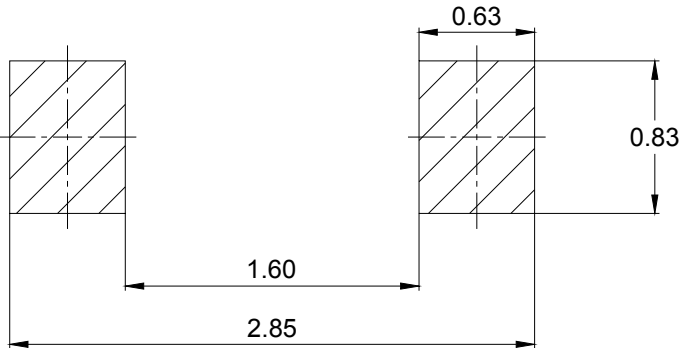
SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.9 Max	
D	0.30 Typical	
E	0.22	0.42
H	0.02	0.1
J	0.1 Typical	
K	2.55	2.75
All Dimensions in mm		



## B5817WS-B5819WS

### Schottky Barrier Diode

#### SOLDERING FOOTPRINT



Unit : mm

#### PACKAGE INFORMATION

Device	Package	Shipping
B5817WS-B5819WS	SOD-323	3000/Tape&Reel

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