

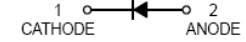
## Schottky Barrier Diode

## B5817WS

### FEATURES

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

**HF**



**SOD-323**

### 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

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

Parameter	symbol	Value	Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	24	V
Peak repetitive Peak reverse voltage	$V_{RRM}$	20	V
Working Peak Reverse voltage	$V_{RWM}$		
DC Reverse Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	14	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	$R_{\theta JA}$	426	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	$T_J, T_{STG}$	-65 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Test Condition	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$	20		V
Reverse voltage leakage current	$I_R$	$V_R=20V$		1	mA
Forward voltage	$V_F$	$I_F=1A$ $I_F=3A$		0.50 0.75	V
Diode capacitance	$C_D$	$V_R=4V, f=1MHz$		120	pF

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

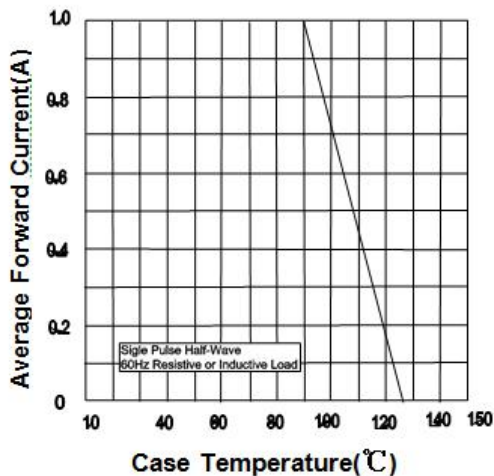


Fig.1 Forward Current Derating Curve

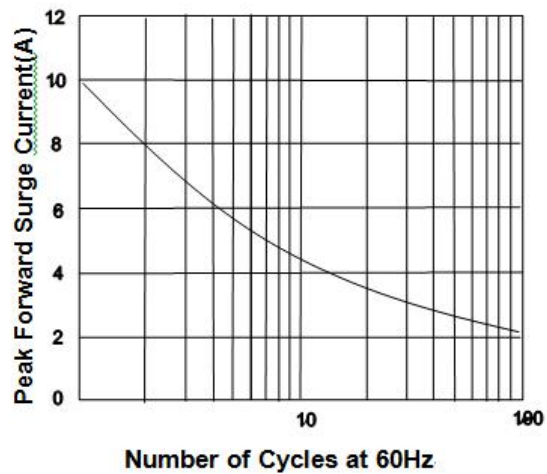


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

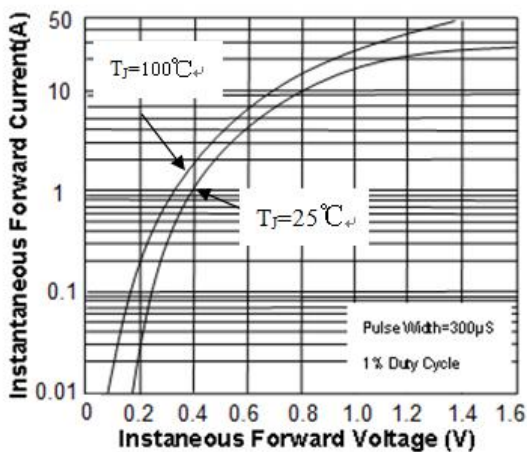


Fig.3 Typical Instantaneous Forward Characteristics

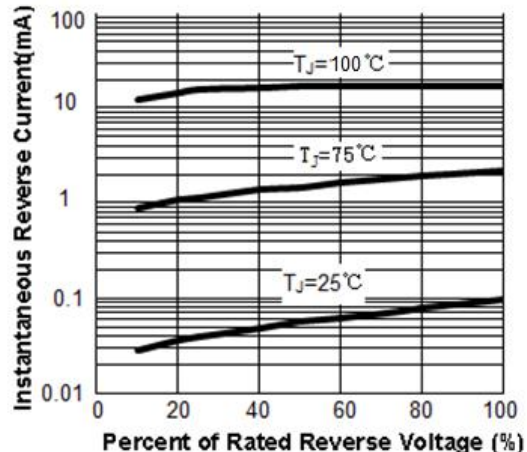


Fig.4 Typical Reverse Characteristics

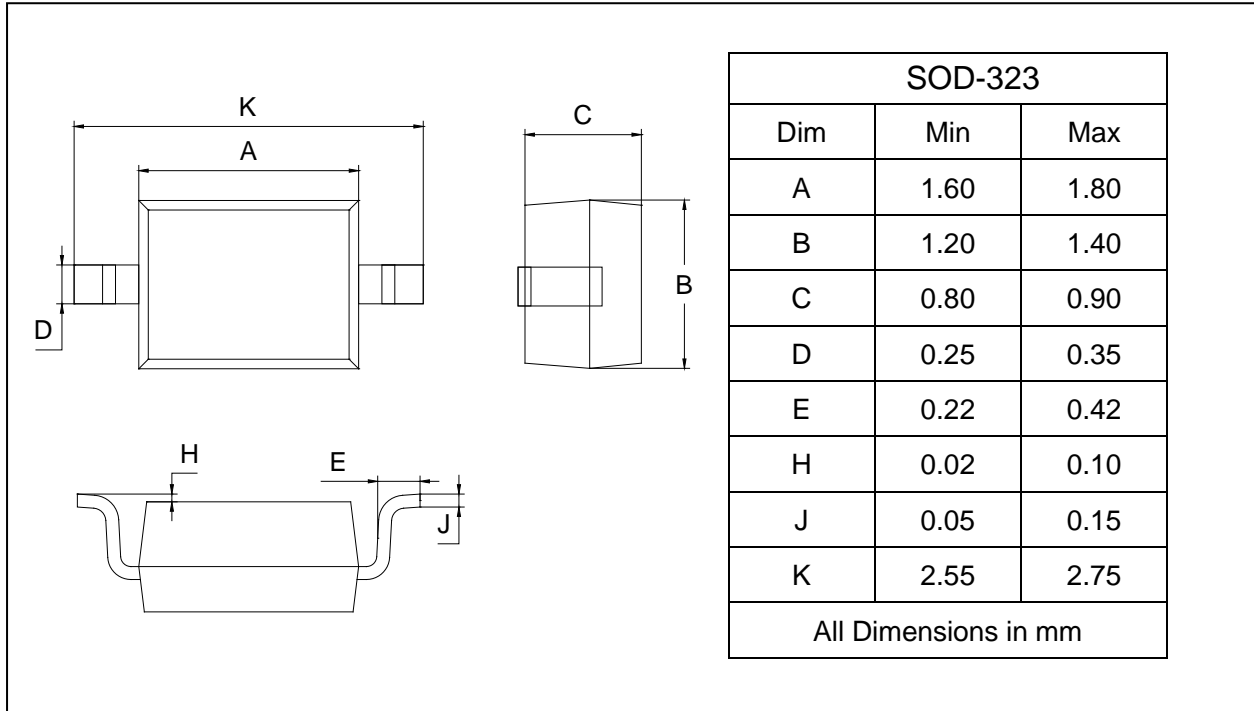
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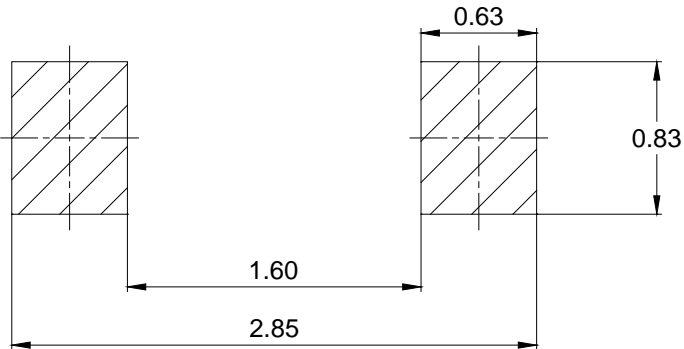
### PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



### SOLDERING FOOTPRINT



Unit: mm

### PACKAGE INFORMATION

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