

Schottky Barrier Diode

B5818WS-B5819WS

FEATURES

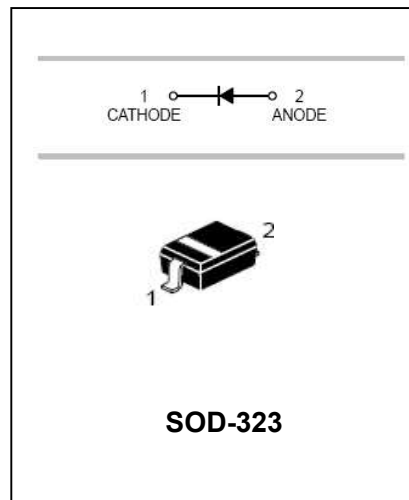
- Extremely low V_F .
- Low stored charge, majority carrier conduction
- Low power loss/high efficient.
- MSL 1.



Lead-free

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 @ Ta=25°C unless otherwise specified

Parameter	symbol	B5818WS	B5819WS	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	36	48	V
Peak repetitive Peak reverse voltage Working Peak Reverse voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	30	40	V
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		°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150		°C

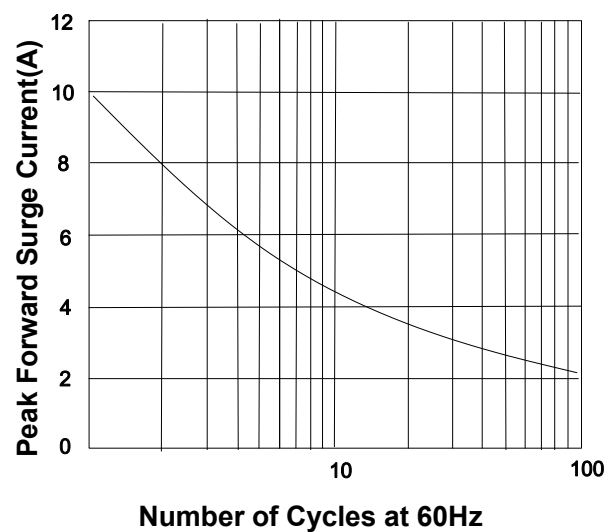
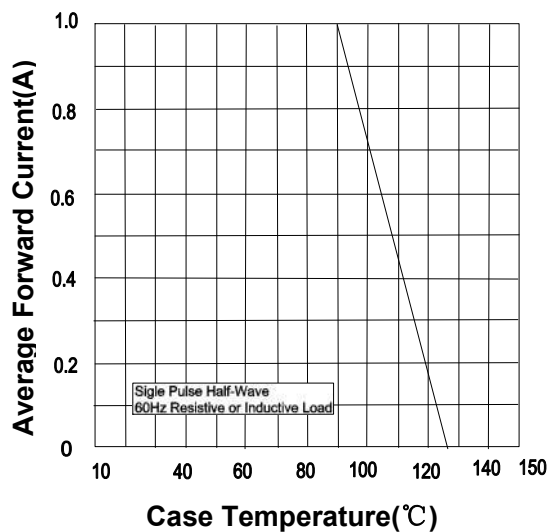
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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



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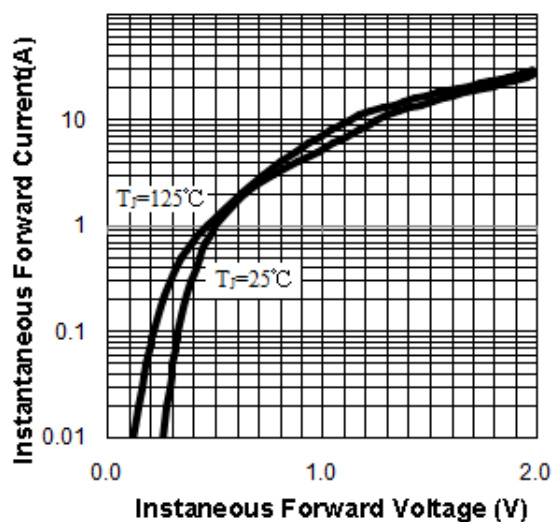


Fig.3 Typical Instantaneous Forward Characteristics

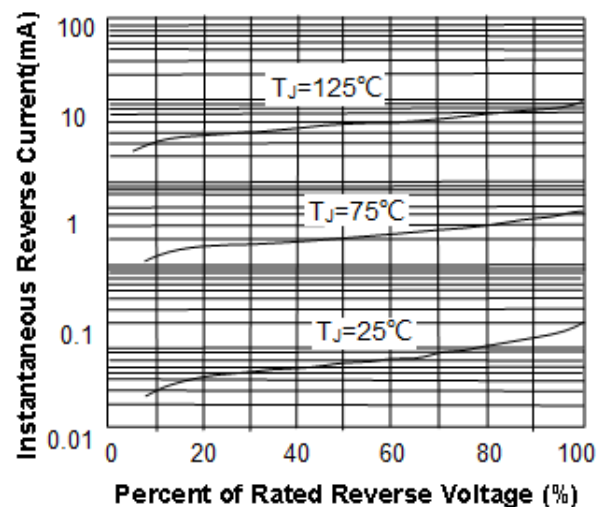
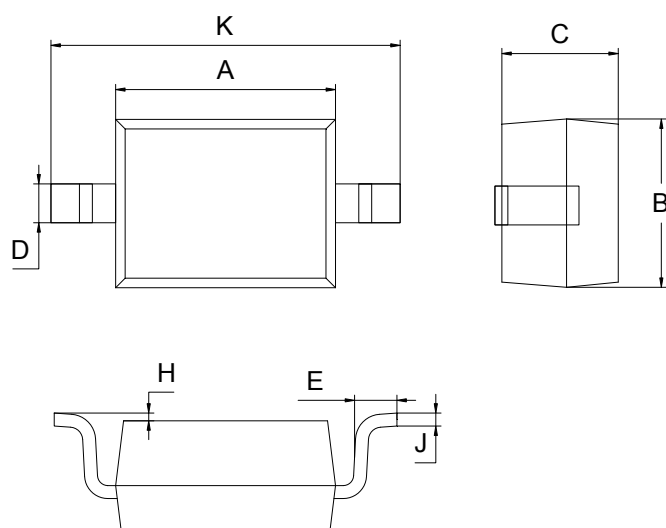


Fig.4 Typical Reverse Characteristics

PACKAGE OUTLINE

Plastic surface mounted package

SOD-323

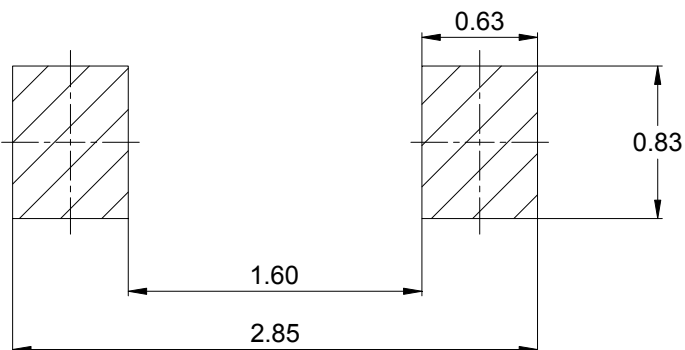


SOD-323		
Dim	Min	Max
A	$T_J=25^{\circ}\text{C}$	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.1
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

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SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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