

Schottky Barrier Diode

B5817WS

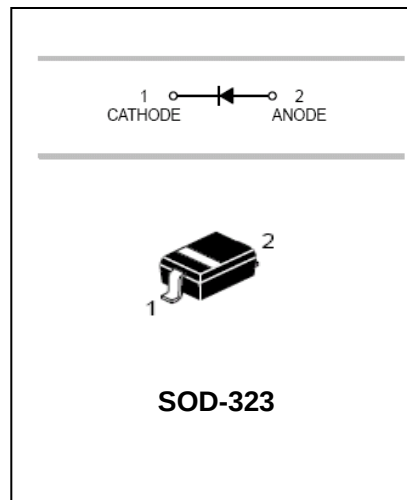
FEATURES

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

HF

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 @ Ta=25°C unless otherwise specified

Parameter	symbol	Value	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	24	V
Peak repetitive Peak reverse voltage Working Peak Reverse voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	20	V
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	°C/W
Junction and Storage Temperature Rage	T_J, T_{STG}	-65 to +125	°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

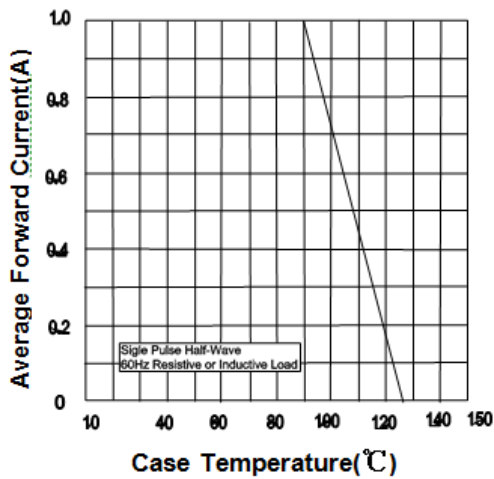


Fig.1 Forward Current Derating Curve

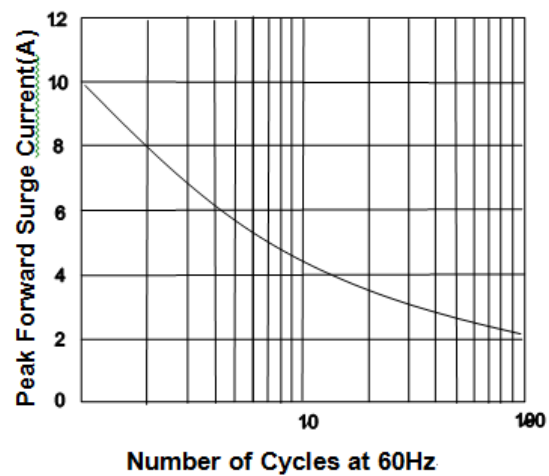


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

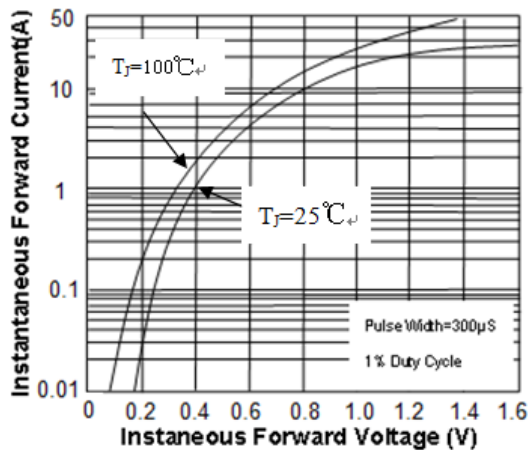


Fig.3 Typical Instantaneous Forward Characteristics

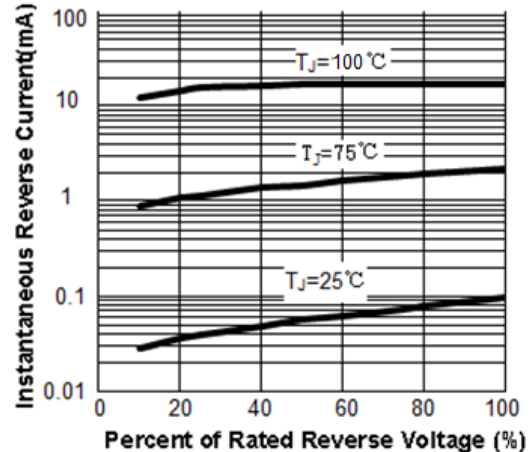


Fig.4 Typical Reverse Characteristics

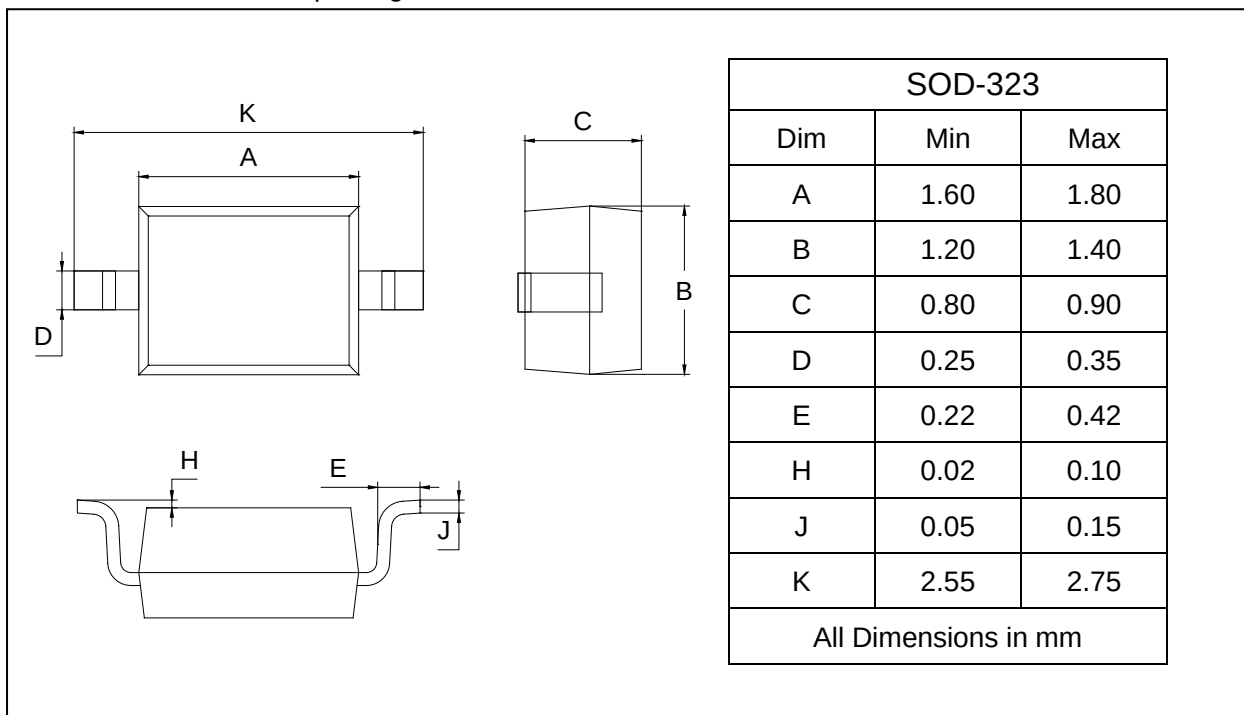
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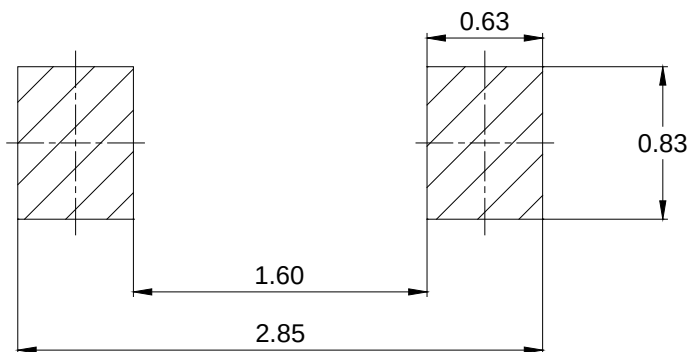
PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

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