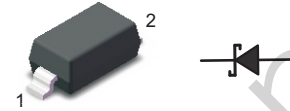


FEATURES

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-123 and symbol

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 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 @ $t=8.3\text{ms}$	I_{FSM}	10	A
Power Dissipation	P_d	235	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	426	$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +125	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

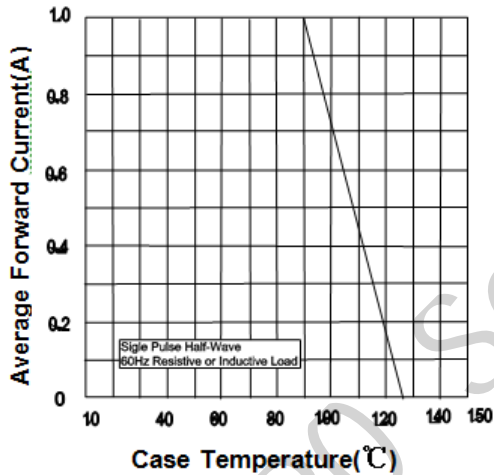


Fig.1 Forward Current Derating Curve

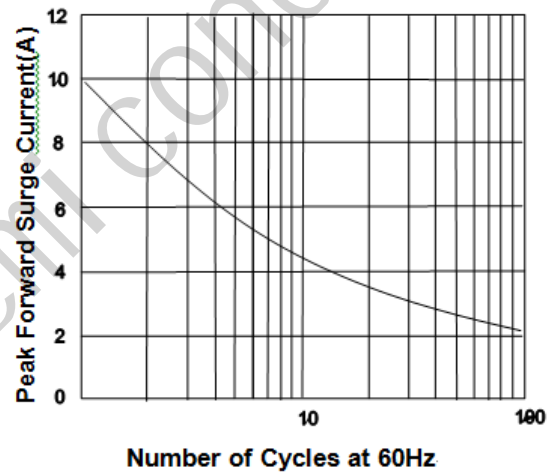


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

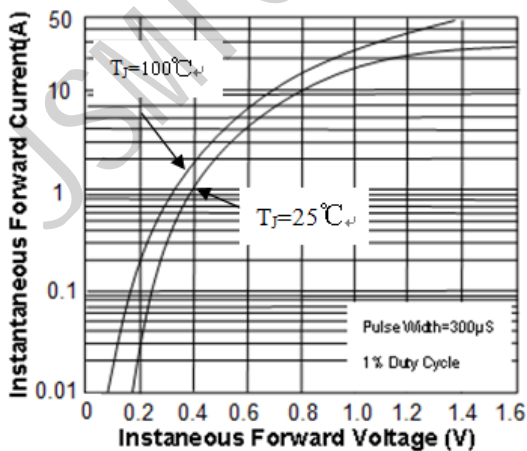


Fig.3 Typical Instantaneous Forward Characteristics

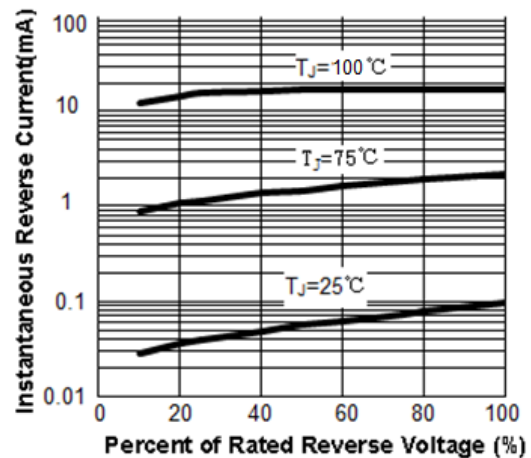
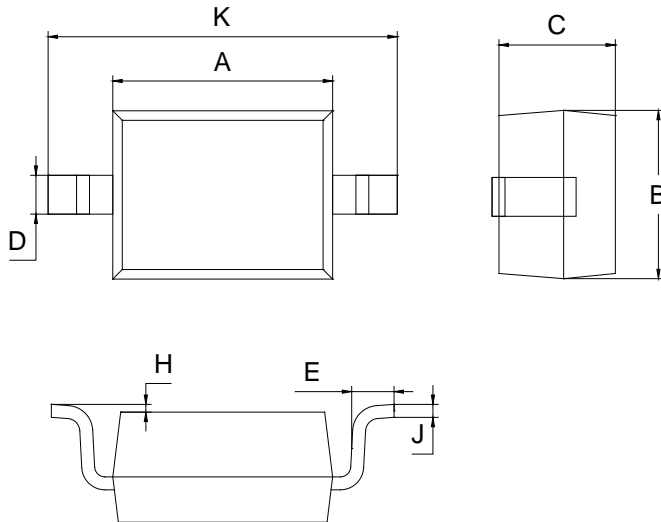


Fig.4 Typical Reverse Characteristics

PACKAGE OUTLINE

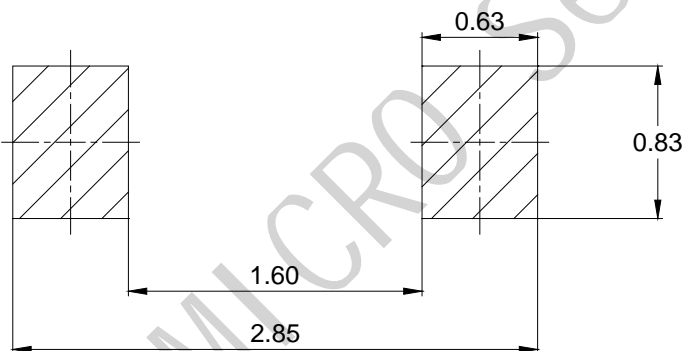
Plastic surface mounted package

SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

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