



Features

- Average Rectified Output Current: $I_O=1A$
- Power Dissipation of 250mw

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
B5817WS	SOD-323	SJ	3000
B5818WS	SOD-323	SK	3000
B5819WS	SOD-323	SL	3000



SOD-323



Maxmim Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	B5817W	B5818W	B5819W	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}	20	30	40	V
DC Blocking Voltage	V_R	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	I_O	1			A
Non-repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	9			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	P_D	250			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200			°C/W
OperationJunction temperature Range	T_J	- 40~+125			°C
Storage Temperature Range	T_{STG}	- 55~+150			°C

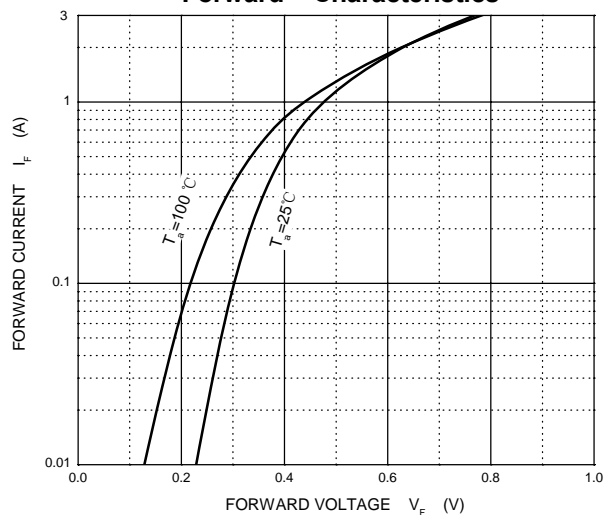
Electrcal Charcteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$ B5817WS B5818WS B5819WS	20 30 40		V
Reverse voltage leakage current	I_R	$V_R=20V$ $V_R=30V$ $V_R=40V$ B5817WS B5818WS B5819WS		1	mA
Forward voltage	V_F	B5817W $I_F=1A$ $I_F=3A$		0.45 0.75	V
		B5818W $I_F=1A$ $I_F=3A$		0.55 0.875	V
		B5819W $I_F=1A$ $I_F=3A$		0.6 0.9	V
Diode capacitance	C_D	$V_R=4V, f=1MHz$		120	pF

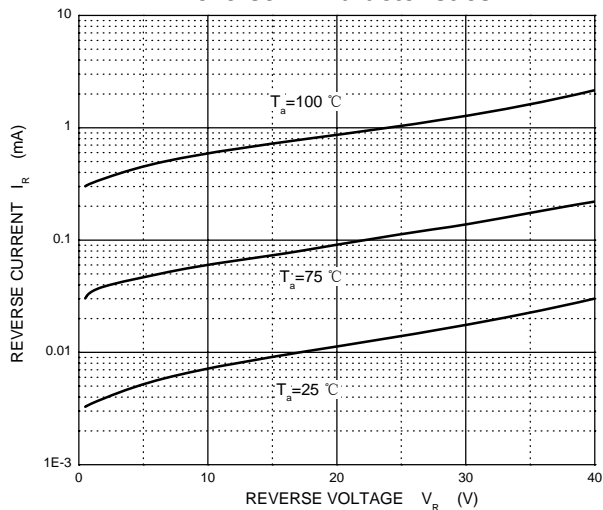


Typical Characteristics

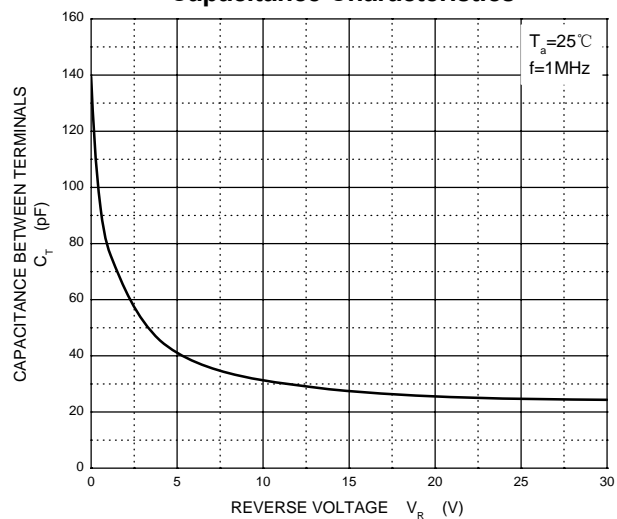
Forward Characteristics



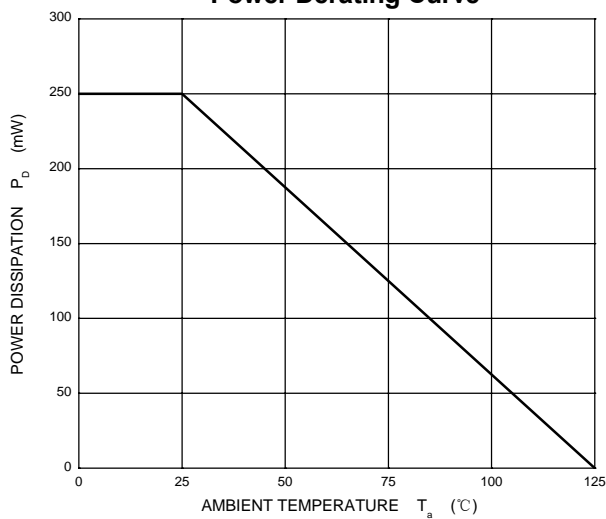
Reverse Characteristics



Capacitance Characteristics

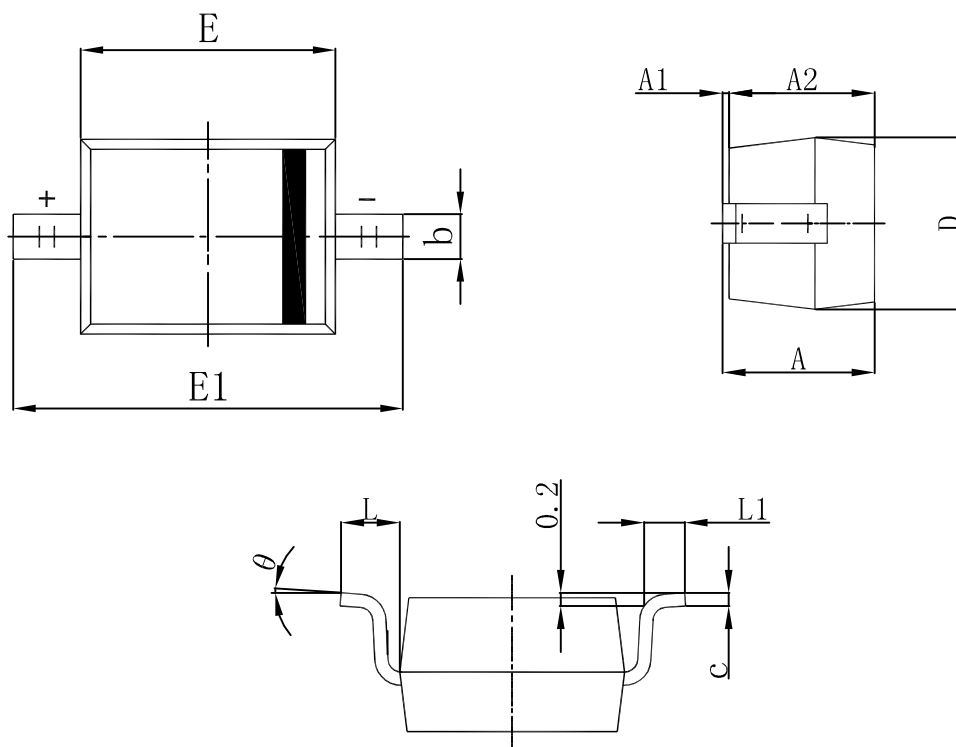


Power Derating Curve





SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



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