

SOD323 Plastic-Encapsulate Diodes

Schottky Rectifier

Features

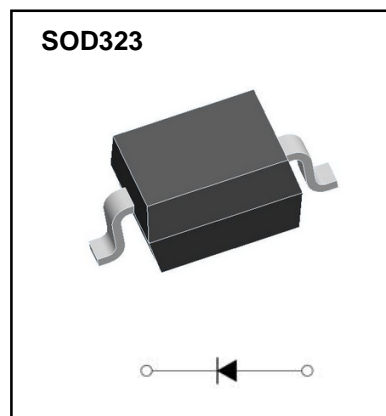
- V_R 20V-40V
- I_O 1A

Applications

- Low Voltage Rectification
- Low Power Consumption Applications
- High Efficiency DC/DC Conversion

Marking

- B5817WS:SJ
- B5818WS:SK
- B5819WS:SL



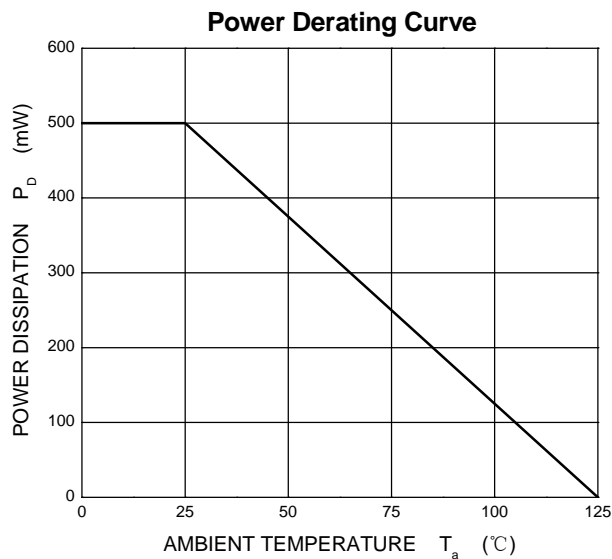
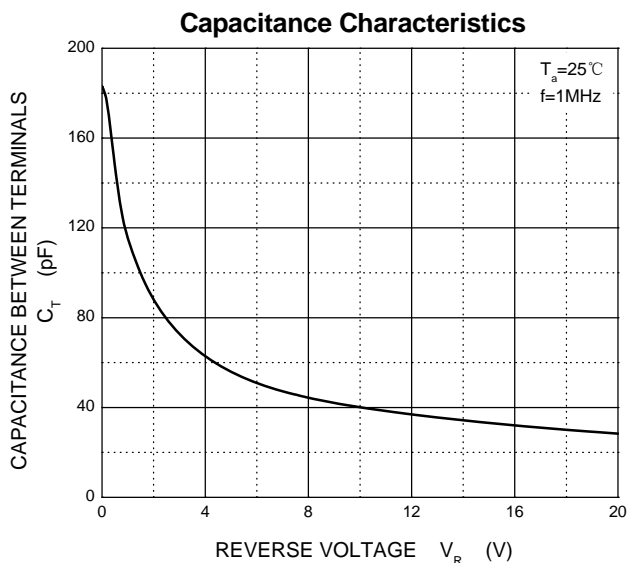
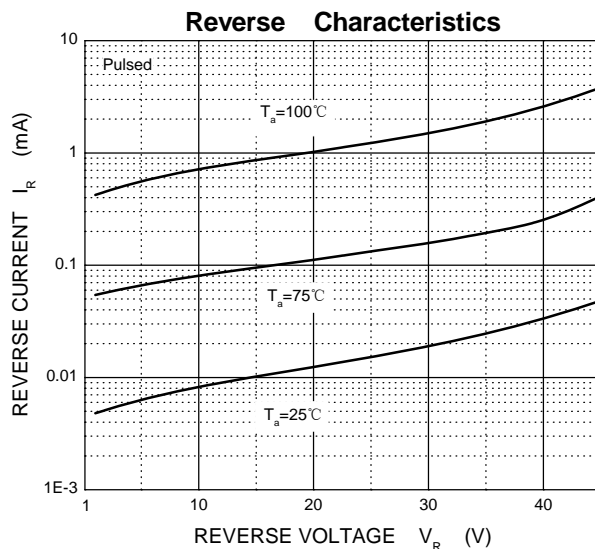
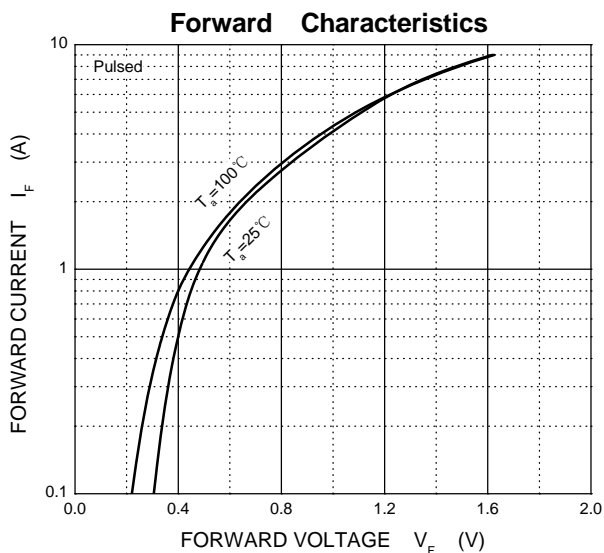
Limiting Values (Absolute Maximum Rating)

Parameter	Symbol	B5817WS	B5818WS	B5819WS	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}				
DC Blocking Voltage	V_R				
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	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	400			$^{\circ}C/W$
Junction temperature	T_J	125			$^{\circ}C$
Storage Temperature	T_{STG}	-55~+150			$^{\circ}C$

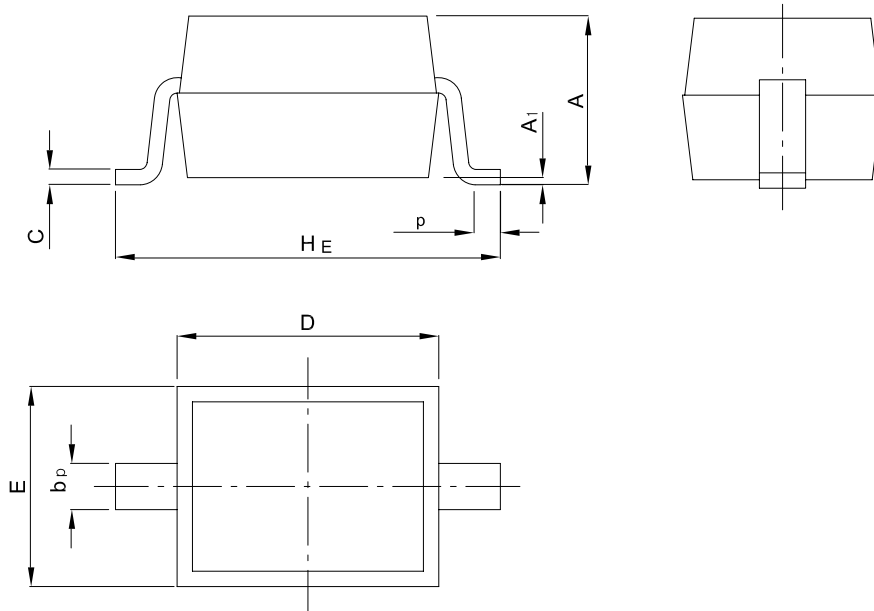
Electrical Characteristics ($T_a=25^{\circ}C$ Unless otherwise specified)

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

Typical Characteristics

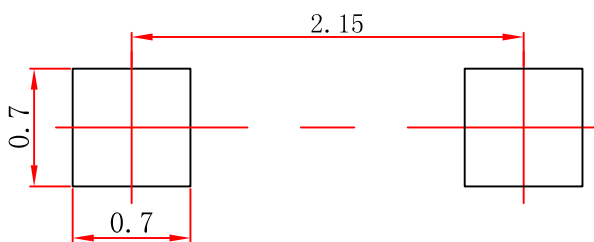


SOD323 Package Outline Dimensions



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.80	0.25	0.10	1.60	1.15	2.30	0.01	0.20

SOD323 Suggested Pad Layout



Note:

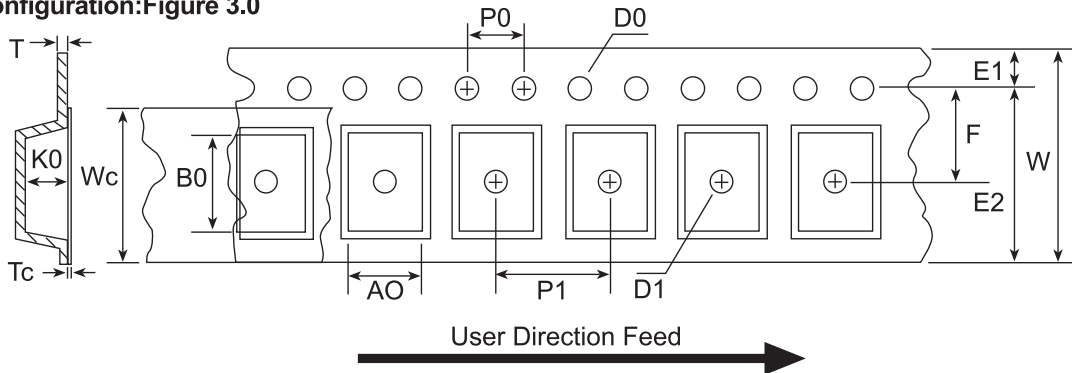
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

JSHD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSHD does not assume any liability arising out of the application or use of any product described herein.

Reel Taping Specifications For Surface Mount Devices-SOD323

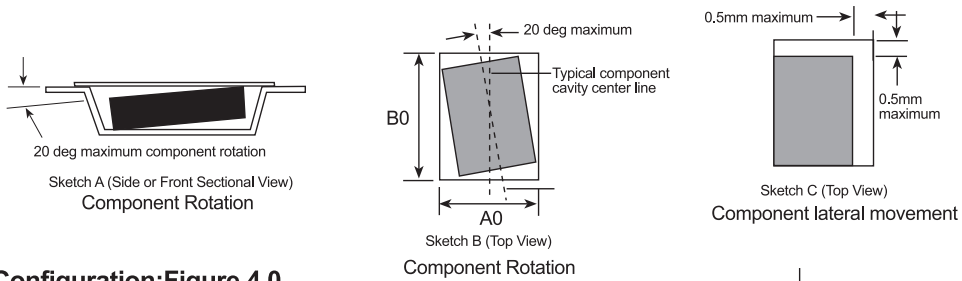
SOD323 Embossed Carrier Tape Configuration: Figure 3.0



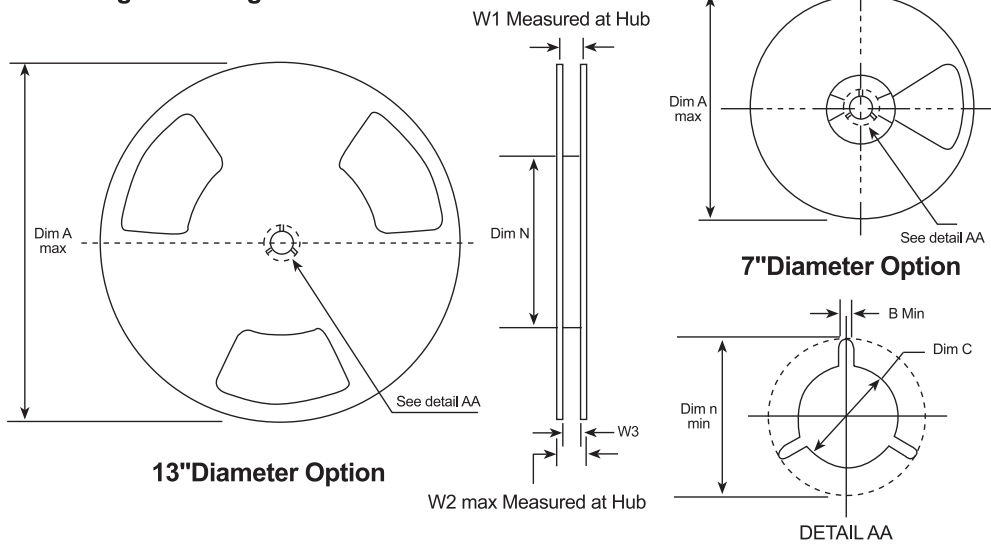
Dimensions are millimeter

Pkg type	A0	B0	W	D0	D1	E1	E2	F	P1	P0	K0	T	Wc	Tc
SOD323 (8mm)	1.46 +/-0.10	2.9 +/-0.10	8.0 +/-0.3	1.50 +/-0.125	1.125 +/-0.125	1.75 +/-0.10	6.25 min	3.50 +/-0.05	4.0 +/-0.10	4.0 +/-0.10	1.25 +/-0.10	0.25 +/-0.020	5.2 +/-0.20	0.06 +/-0.02

Notes: A0, B0 and K0 dimensions are determined with respect to the EW Jeced RS-481 rotational and lateral movement requirements (see sketches A, B and C).



SOD323 Reel Configuration: Figure 4.0



Dimensions are in inches and millimeter

Type Size	Reel Option	Dim A	Dim B	Dim C	Dim D	Dim N	Dim W1	Dim W2	Dim W3 (LSL-USL)
8mm	7" Dia	7.00 177.8	0.059 1.5	512+0.020/-0.008 13+0.5/-0.2	0.795 20.0	2.165 55	0.331+0.059/-0.000 8.4+1.5/0	0.567 14.4	0.311-0.429 7.9-10.9
8mm	13" Dia	13.00 330	0.059 1.5	512+0.020/-0.008 13+0.5/-0.2	0.795 20.0	4.00 100	0.331+0.059/-0.000 8.4+1.5/0	0.567 14.4	0.311-0.429 7.9-10.9