

Plastic-Encapsulate Schottky Barrier Diode

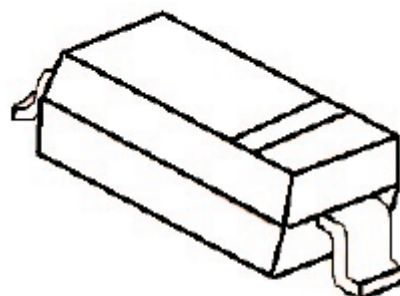
Features

- ◆ High Current Capability
- ◆ Low Forward Voltage Drop

Mechanical Data

- ◆ SOD-323 Small Outline Plastic Package
- ◆ Polarity: Color band denotes cathode end
- ◆ EpoxyUL:94V-0
- ◆ Mounting Position:Any

SOD-323



Marking: B5817WS: SJ
B5818WS: SK
B5819WS: SL

Maximum Ratings and Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

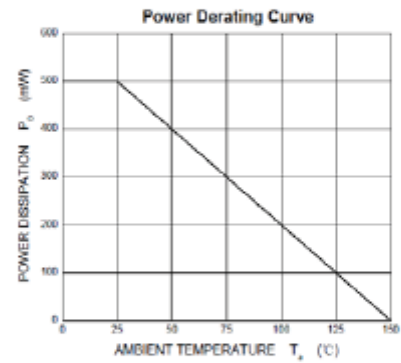
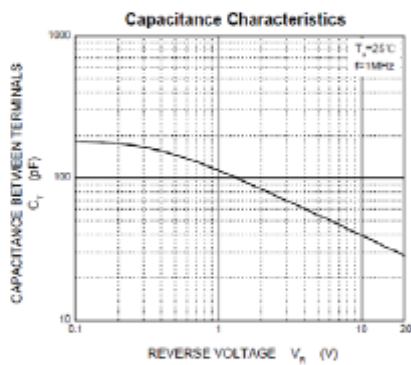
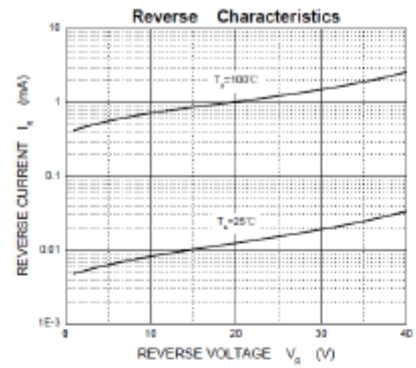
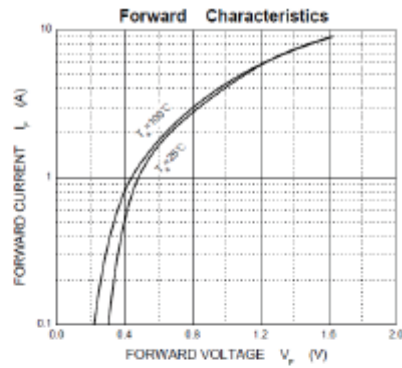
Parameter	Symbol	B5817WS	B5818WS	B5819WS	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified Current .	I_{FM}	1.0			A
Peak forward surge current 8.3 ms single half sine -wave	I_{FSM}	9			A
Typical Current Squared Time	I^2T	0.337			A ² S
Typical thermal resistance	$R_{\theta JA}$	400			°C/W
Power Dissipation	PD	250			mW
Storage temperature range	T_{STG}	-50-+150			°C

Electrical Characteristics

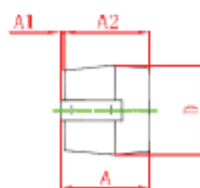
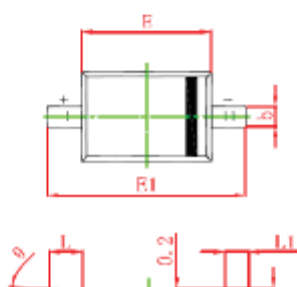
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Test conditions	B5817WS	B5818WS	B5819WS	UNITS
Maximum forward voltage	V_F	IF=1.0A IF=3.0A	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum reverse breakdown voltage	V_R	IR=1mA	20	30	40	V
Maximum reverse current	I_R	VR=20V B5817WS VR=30V B5818WS VR=40V B5819WS	1.0			mA
Type junction capacitance	C_J	VR=4.0V,f=1MHz	120			pF

RATING AND CHARACTERISTICS CURVES (B5817WS THRU B5819WS)



SOD-323 PACKAGE OUTLINE Plastic surface mounted package



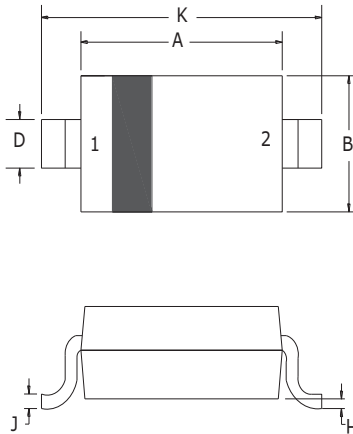
Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700

SOD-323

Mechanical Data

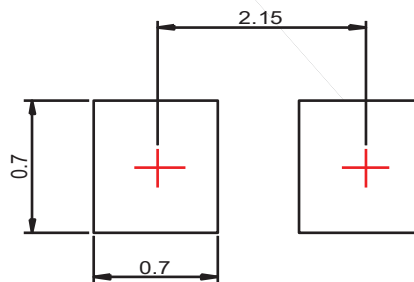
Case: SOD-323

Case Material: Molded Plastic. UL Flammability

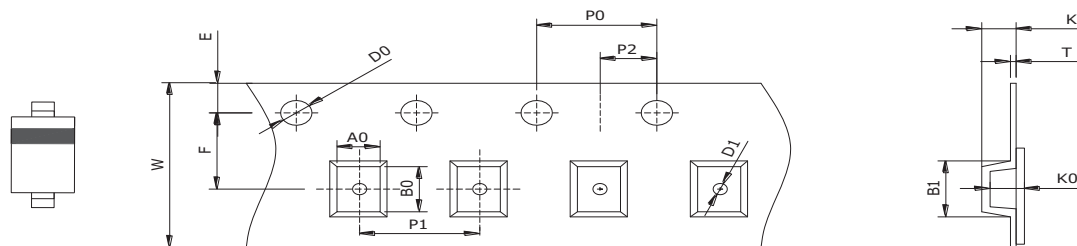


Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	1.60	1.80	0.063	0.071
B	1.2	1.40	0.047	0.055
C	0.80	0.90	0.031	0.035
D	0.25	0.35	0.010	0.014
E	0.15REF		0.006REF	
H	0	0.10	0	0.004
J	0.08	0.15	0.003	0.006
K	2.50	2.70	0.098	0.106

Recommended Pad outline



SOD-323 Reel Dim



Package	Diode Size	Pocket Size B0×A0×K0(mm)	Tape Width	Reel Diameter	Quantity Per Reel	P0	P1
SOD-323	2.60×1.40×1.05	3.30×1.50×1.25	8mm	178mm(7")	3000	4mm	4mm
D0	D1	E	F	K	T	W	
1.5mm	1.05mm	1.75mm	3.5mm	0.95mm	0.2mm	8mm	

Packing

Reel	Reel Size	Box (Box Size)	Carton(Carton Size)
3000pcs	7inch	45,000pcs(203*203*195)	180,000pcs(438*438*220)

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