




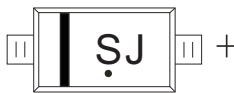


# B5817W-B5819W

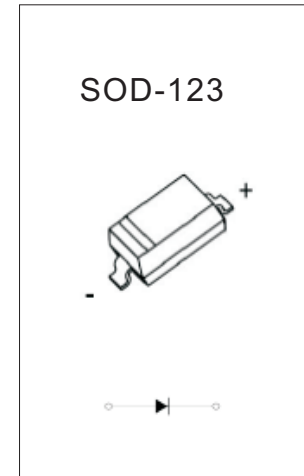
# Schottky Barrier Diodes

## FEATURES

For use in low voltage, high frequency inverters.  
Free wheeling, and polarity protection applications.

Marking:

B5817W:SJ	B5818W:SK	B5819W:SL
		
		



The marking bar indicates the cathode.

Solid dot = Green molding compound device, if none, the normal device.

## MAXIMUM RATINGS(Ta=25°C)

Symbol	Parameter	B5817W	B5818W	B5819W	Unit
VRM	Non-Repetitive peak reverse voltage	20	30	40	V
VRRM	Peak repetitive peak reverse voltage				
VRWM	Working peak	20	30	40	V
VR	DC blocking voltage				
VR(RMS)	RMS reverse voltage	14	21	28	V
IFM	Forward continuous current	9			A
IO	Average rectified output current	1			A
IFSM	Non-repetitive Peak forward surge current @8.3mS	1.5			A
PD	Power dissipation	500			mW
RθJA	Thermal Resistance Form Junction to Ambient	200			°C/W
TJ	Junction Temperature	125			°C
TSTG	Storage Temperature Range	-55~+150			°C



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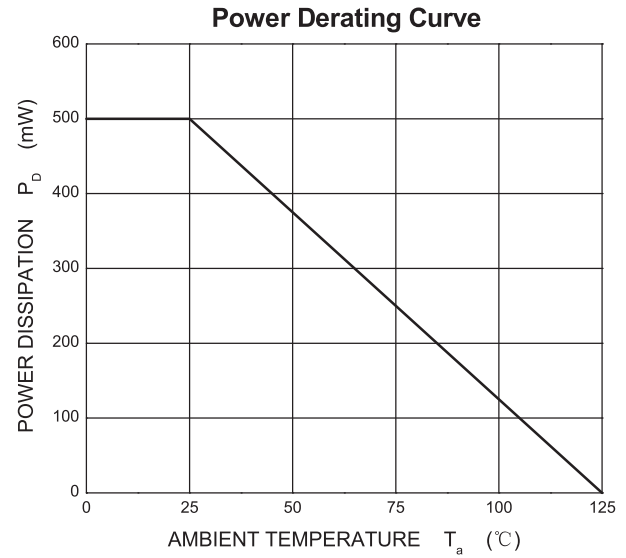
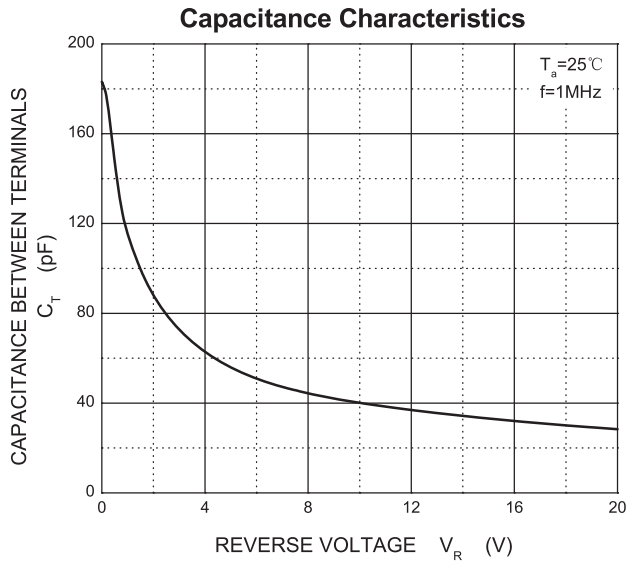
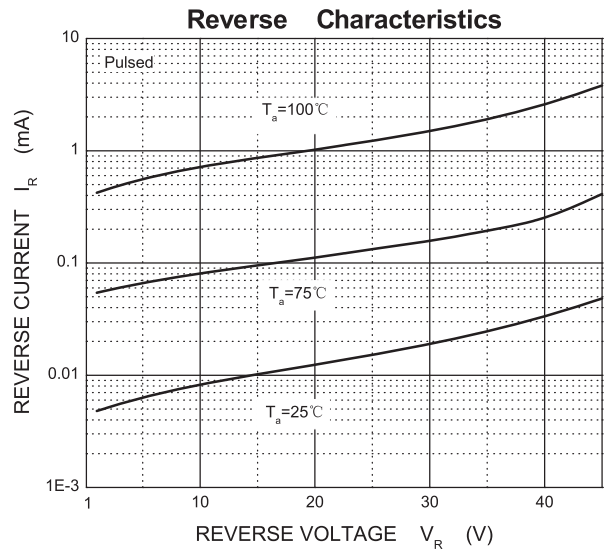
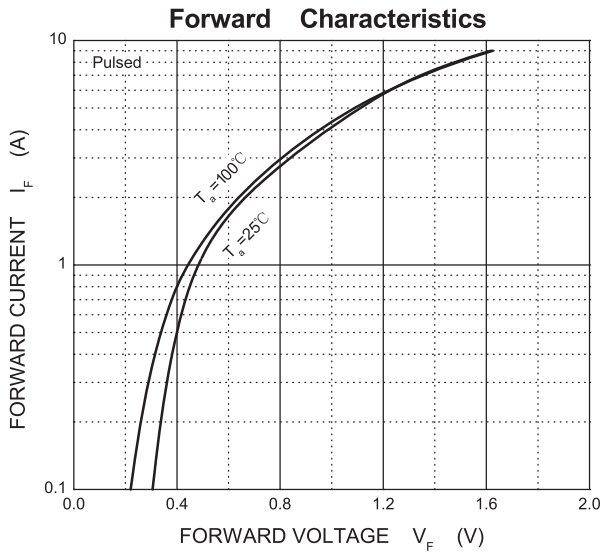
## ELECTRICAL CHARACTERISTICS(Ta=25°C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units		
Forward voltage	V <sub>F</sub>	B5817W	I <sub>F1</sub> =1A I <sub>F2</sub> =3A			0.450	V	
						0.750	V	
		B5818W	I <sub>F1</sub> =1A I <sub>F2</sub> =3A				0.550	V
							0.875	V
		B5819W	I <sub>F1</sub> =1A I <sub>F2</sub> =3A				0.600	V
							0.900	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =20V	B5817W			1	mA	
		V <sub>R</sub> =30V	B5818W					
		V <sub>R</sub> =40V	B5819W					
Reverse breakdown voltage	V <sub>BR</sub>	I <sub>R</sub> =1mA	B5817W	20			V	
			B5818W	30				
			B5819W	40				
Diode capacitance	C <sub>D</sub>	V <sub>R</sub> =4V, f=1.0MHz				120	pF	

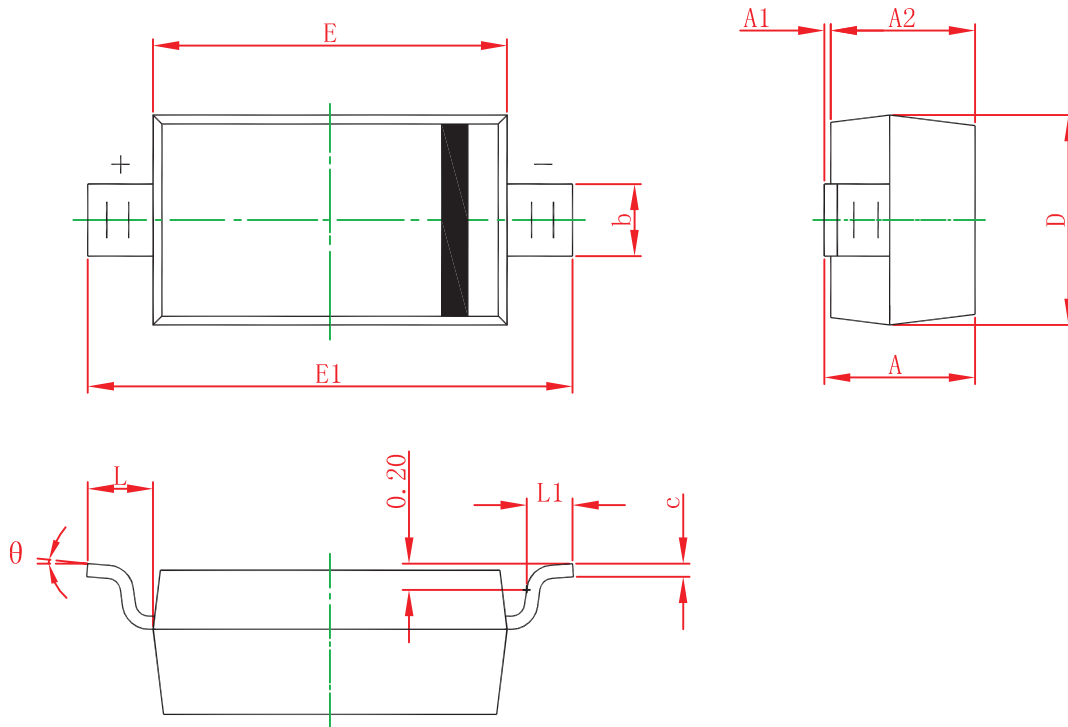


# B5817W-B5819W

## TYPICAL CHARACTERISTICS (Ta=25°C)



## SOD-123 Package Outline Dimensions

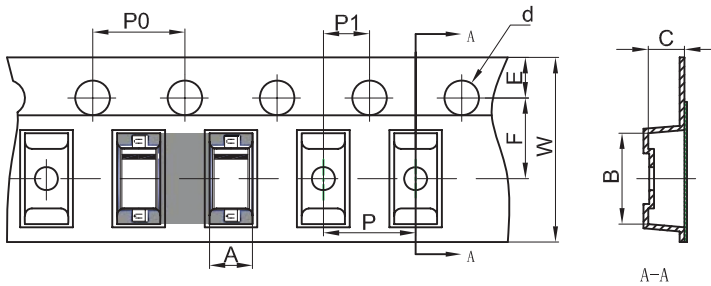


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF.		0.020 REF.	
L1	0.250	0.450	0.010	0.018
$\theta$	0?	8?	0?	8?



## SOD-123 Tape and reel

### SOD-123 Embossed Carrier Tape

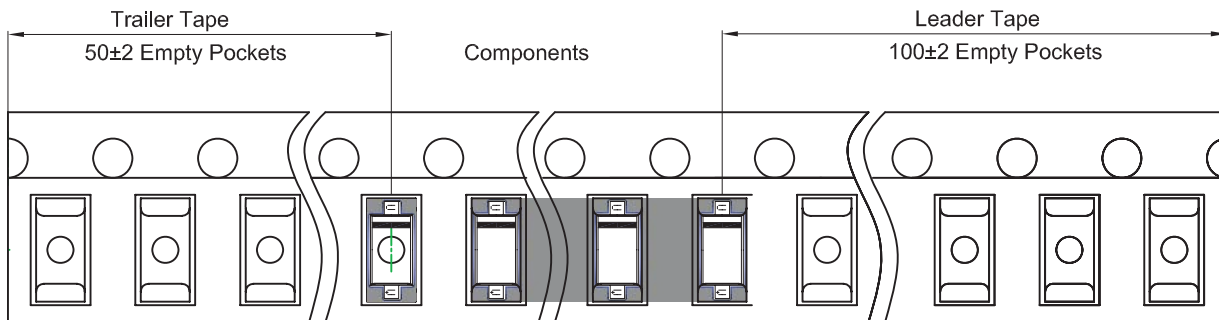


#### Packaging Description:

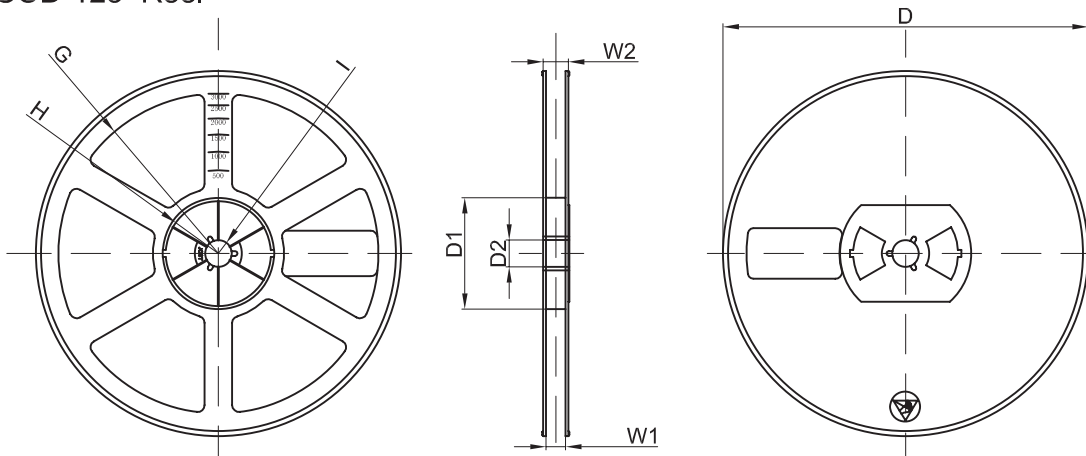
SOD-123 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.94	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

### SOD-123 Tape Leader and Trailer



### SOD-123 Reel

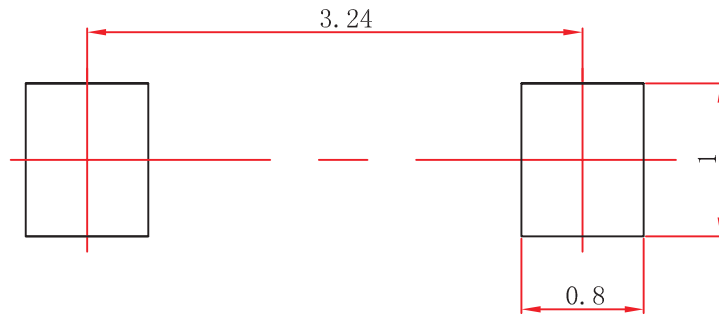


Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

## SOD-123 Suggested Pad size

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中心距：3.24  
脚宽：0.55  
焊盘宽：1  
脚长：0.50  
焊盘长：0.80

### 技术要求

1. 塑封体尺寸 $2.70 \times 1.60$ ;
2. 未注公差为： $\pm 0.05$ ;
3. 所有单位为：mm。

Unit: mm

# ZOHE ELECTRONIC TECHNOLOGY PACKING PROCESS

