

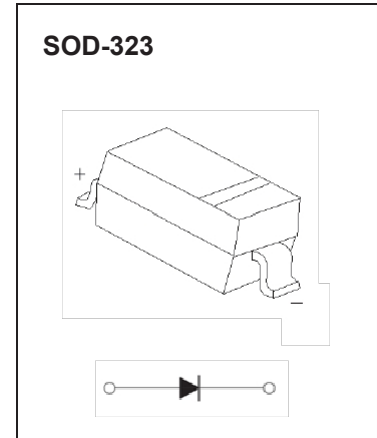
# SOD-323 Plastic-Encapsulate Diodes

## B5817WS-B5819WS SCHOTTKY BARRIER DIODE

### FEATURES

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

**MARKING:** B5817W6: SJ  
 B5818W6:SK  
 B5819W6: SL



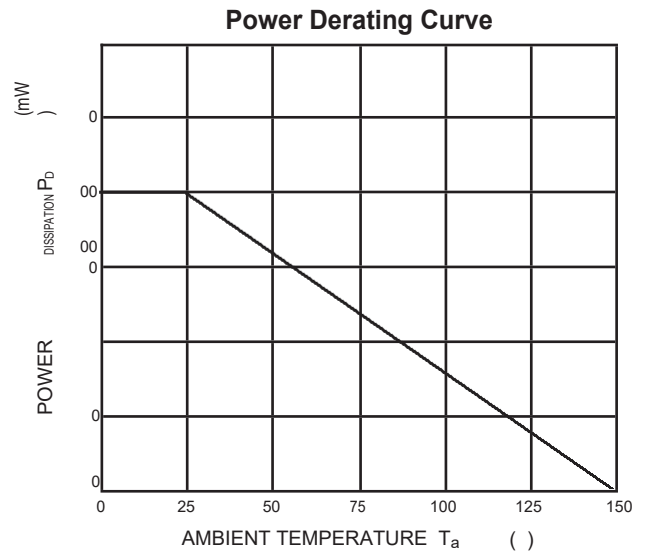
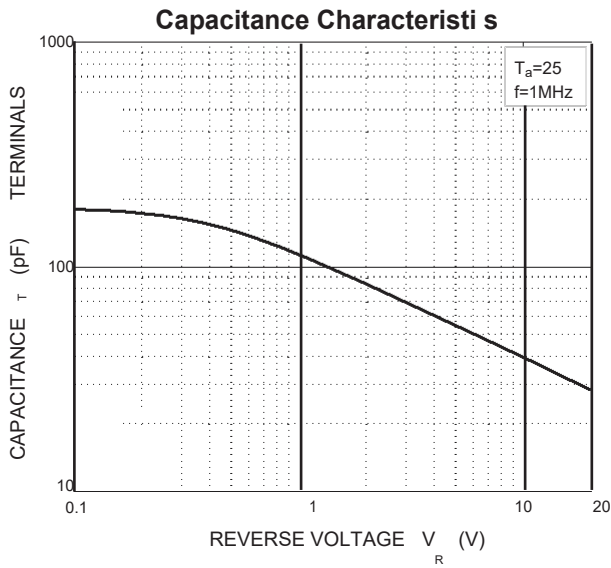
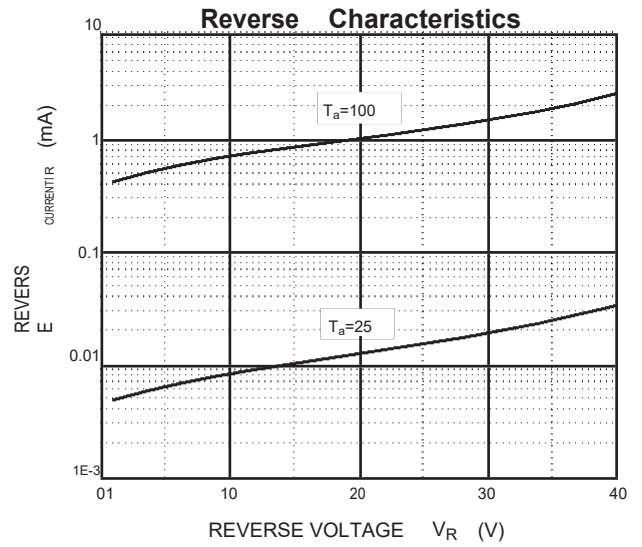
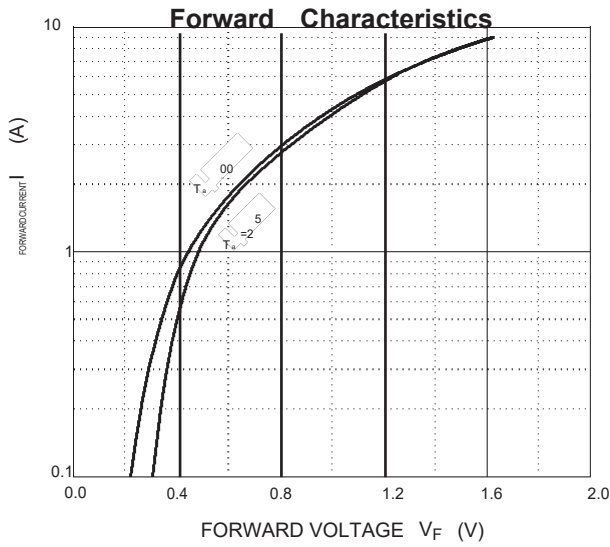
### Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25Я

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
Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	2.5			A
Repetitive Peak Forward Current	$I_{FRM}$	1.5			A
Power Dissipation	$P_d$	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625			Я/W
Storage Temperature	$T_{STG}$	-55~+150			

### ELECTRICAL CHARACTERISTICS (Ta=25Я unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit	
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1mA$			V	
		B5817W6	20			
		B5818W6	30			
Reverse voltage leakage current	$I_R$	$V_R=20V$		1	mA	
		$V_R=30V$	B5817W6			
		$V_R=40V$	B5818W6			
Forward voltage	$V_F$	B5817W6	$I_F=1A$	0.45	V	
			$I_F=3A$	0.75		
		B5818W6	$I_F=1A$	0.55	V	
			$I_F=3A$	0.875		
		B5819W6	$I_F=1A$	0.6	V	
			$I_F=3A$	0.9		
Diode capacitance	$C_D$	$V_R=4V, f=1MHz$		120	pF	

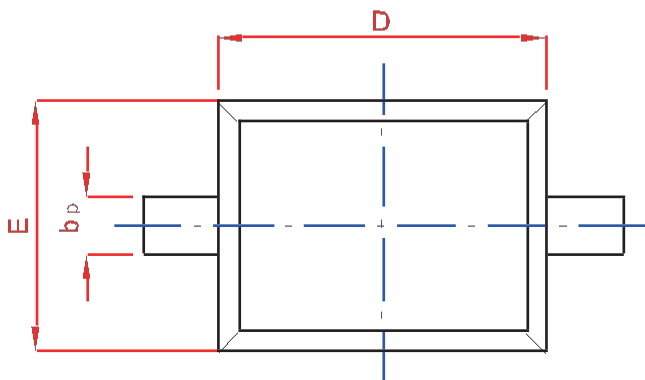
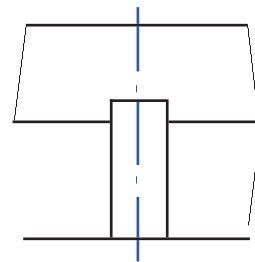
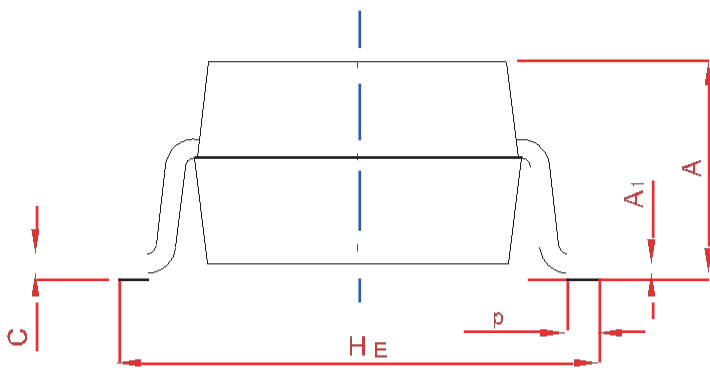
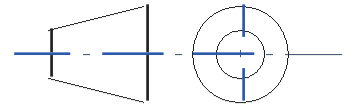
# Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>	A <sub>1</sub>	L <sub>p</sub>
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20

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