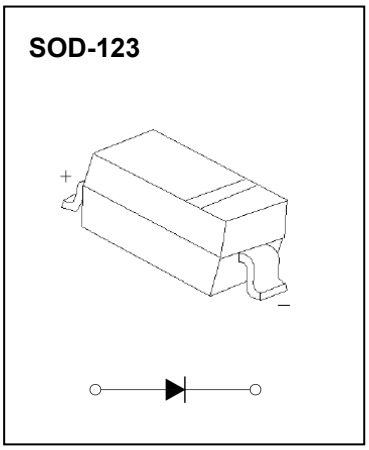
SOD-123 Plastic-Encapsulate Diodes

B5817W-B5819W SCHOTTKY BARRIER DIODE



FEATURES

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

MARKING: B5817W: SJ
B5818W:SK
B5819W: SL

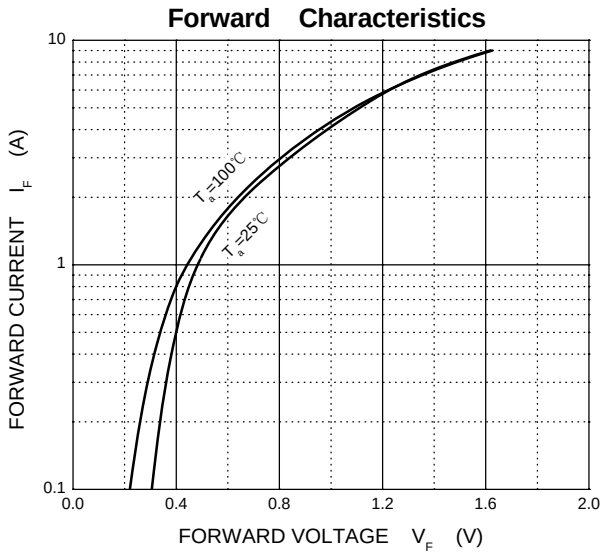
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

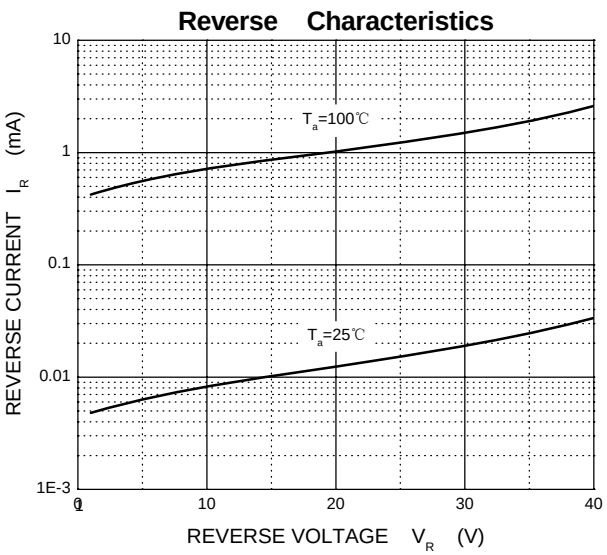
Parameter	Symbol	B5817W	B5818W	B5819W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	20	30	40	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	I_O	1			A
Peak Forward Surge Current @t=8.3ms	I_{FSM}	25			A
Repetitive Peak Forward Current	I_{FRM}	1.5			A
Power Dissipation	Pd	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250			℃/W
Storage Temperature	T_{STG}	-55~+150			℃

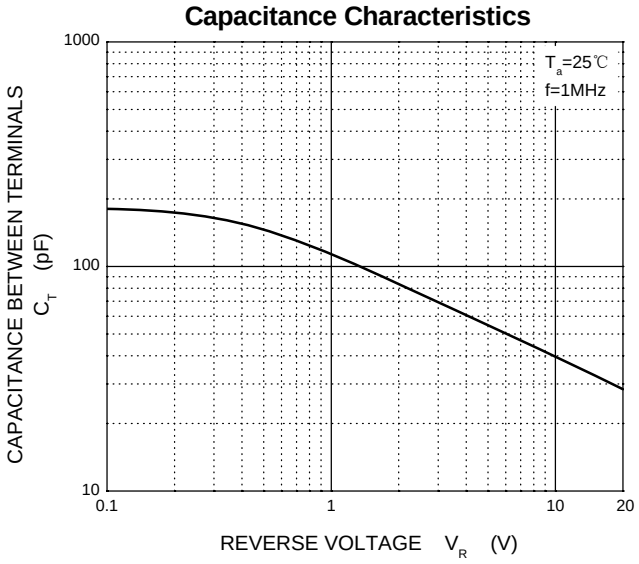
ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

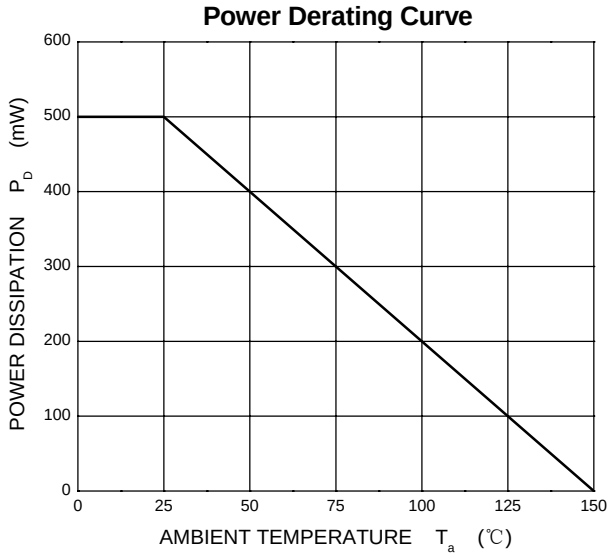
Parameter	Symbol	Test conditions		Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	I_R= 1mA	B5817W B5818W B5819W	20 30 40		V
Reverse voltage leakage current	I_R	V_R=20V V_R=30V V_R=40V	B5817W B5818W B5819W		1	mA
Forward voltage	V_F	B5817W	I_F=1A		0.45	V
			I_F=3A		0.75	
		B5818W	I_F=1A		0.55	V
			I_F=3A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

Typical Characteristics B5817W



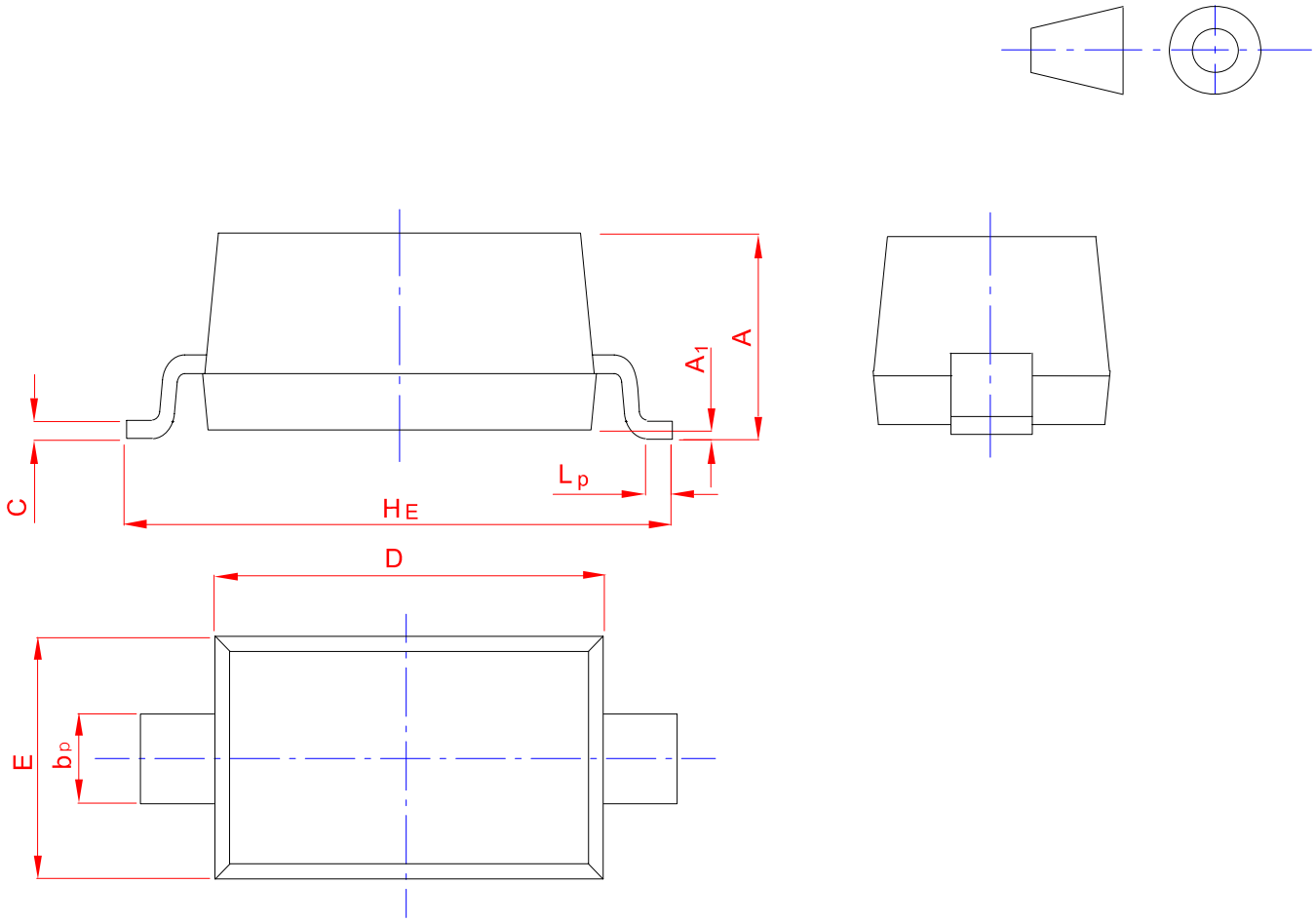






PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-123**



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20