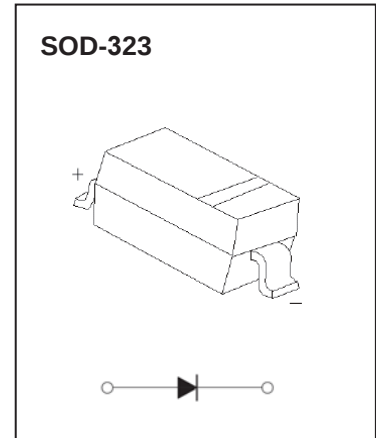


FEATURES

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

MARKING: B5817WS: SJ
B5818WS:SK
B5819WS: SL



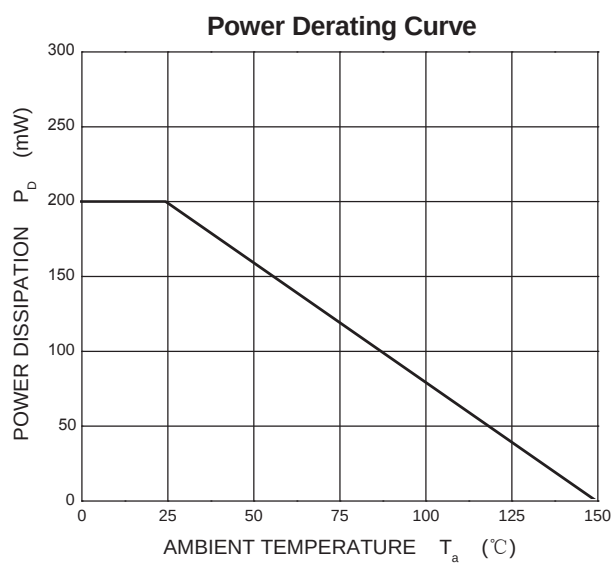
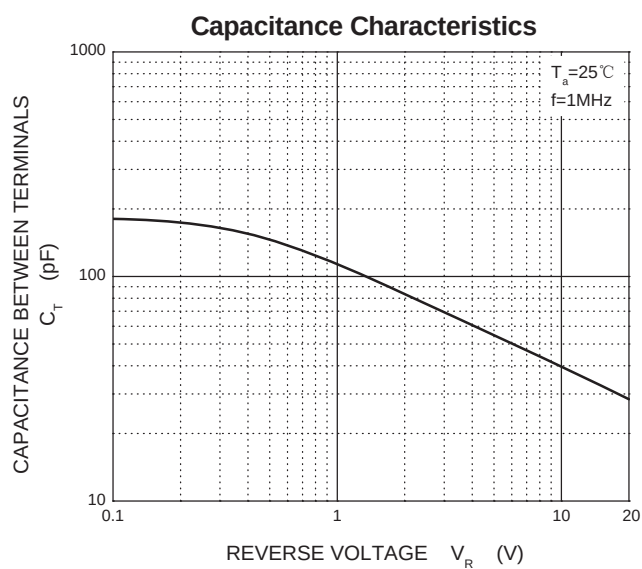
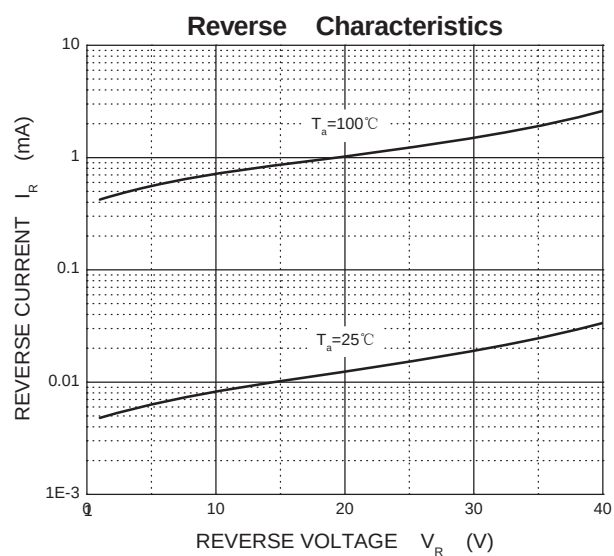
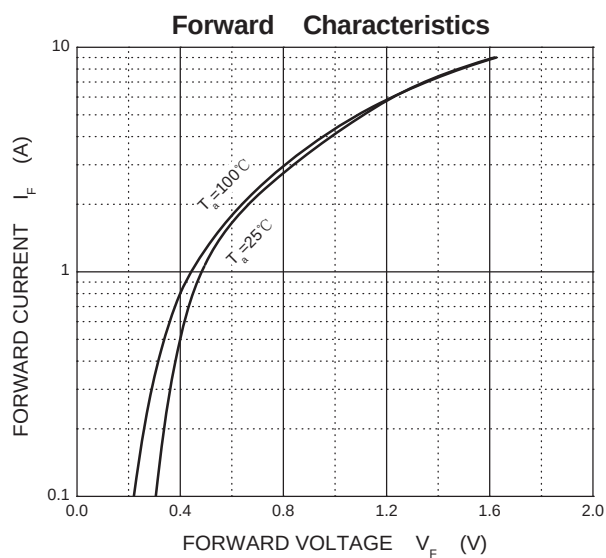
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	B5817WS	B5818WS	B5819WS	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	P_d	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625			°C/W
Storage Temperature	T_{STG}	-55~+150			°C

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1mA$ B5817WS B5818WS B5819WS	20 30 40		V
Reverse voltage leakage current	I_R	$V_R = 20V$ B5817WS $V_R = 30V$ B5818WS $V_R = 40V$ 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

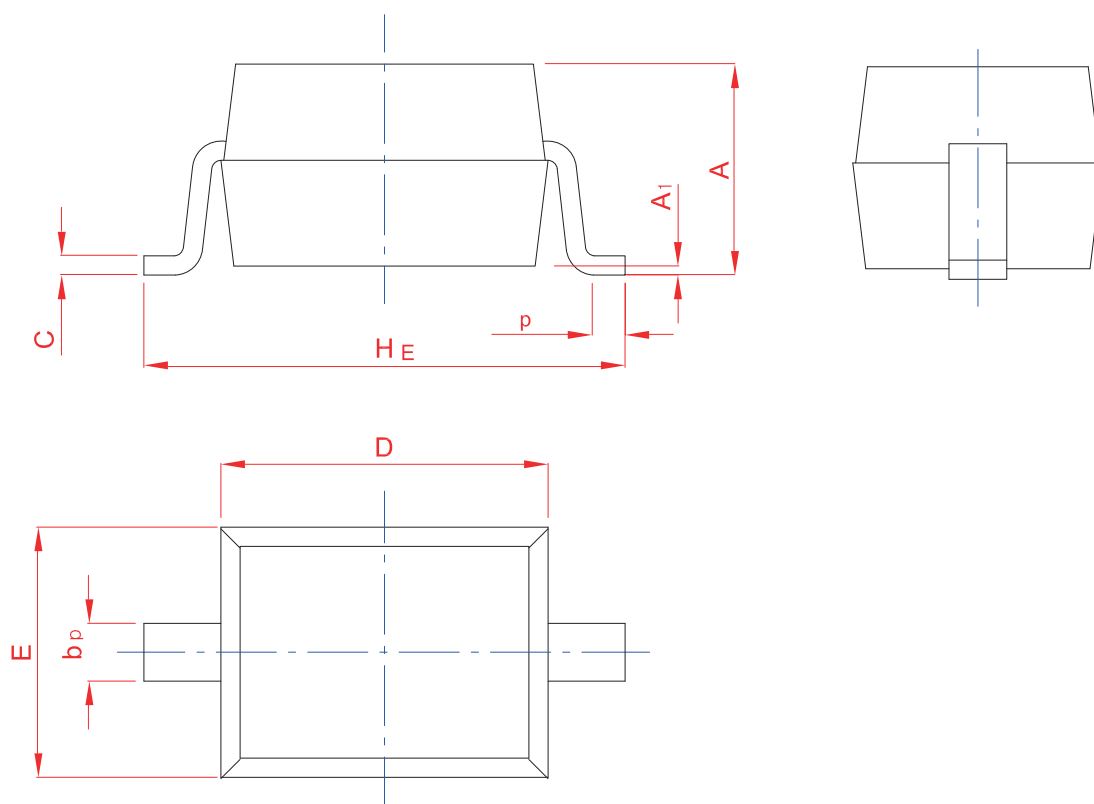
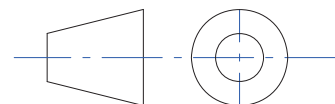
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20 0.90	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30	0.10 0.01	0.50 0.20