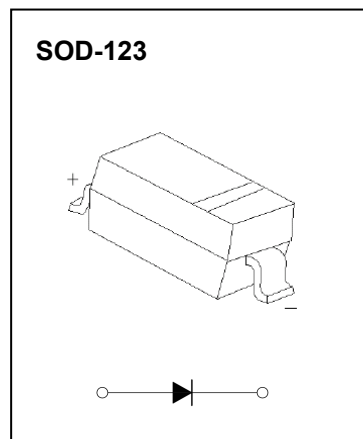


FEATURES

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

MARKING: KB5817W: SJ
KB5818W:SK
KB5819W: SL



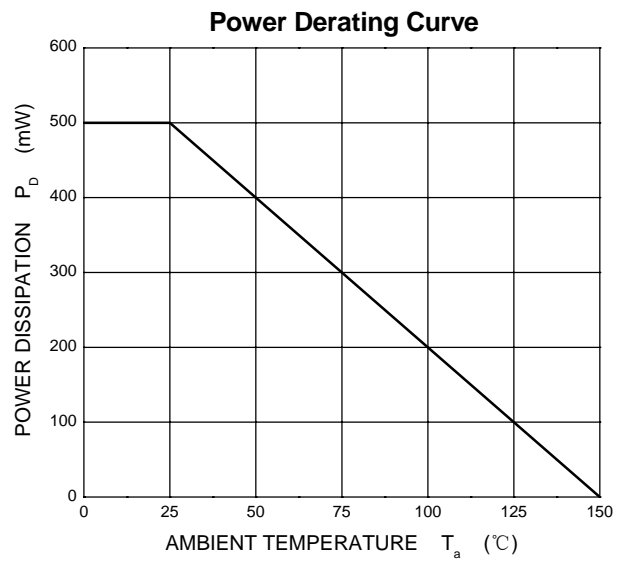
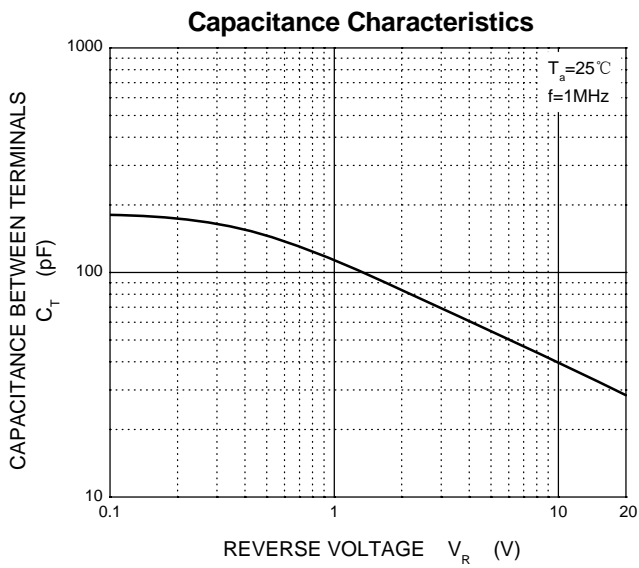
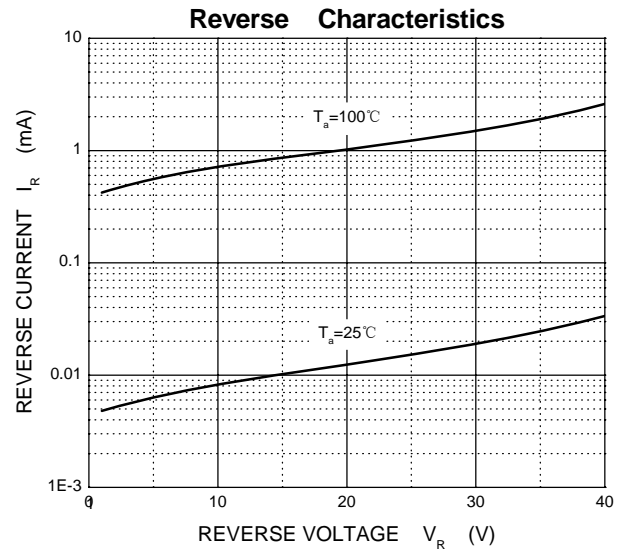
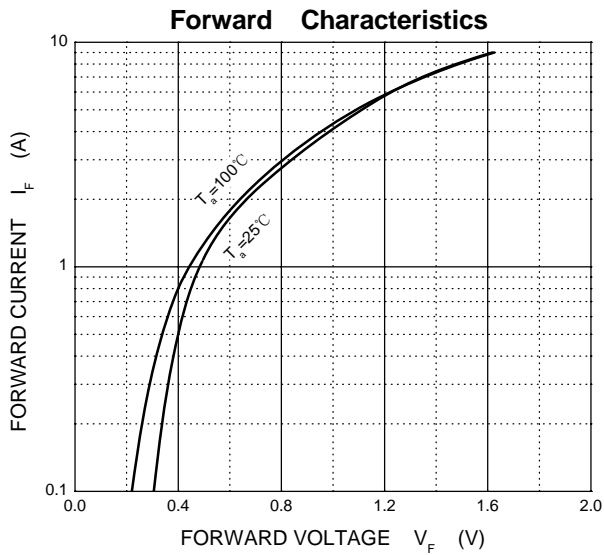
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	KB5817W	KB5818W	KB5819W	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	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250			°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	$V_{(BR)}$	$I_R = 1mA$ KB5817W KB5818W KB5819W	20 30 40		V
Reverse voltage leakage current	I_R	$V_R = 20V$ $V_R = 30V$ $V_R = 40V$ KB5817W KB5818W KB5819W		1	mA
Forward voltage	V_F	KB5817W $I_F = 1A$ $I_F = 3A$		0.45 0.75	V
		KB5818W $I_F = 1A$ $I_F = 3A$		0.55 0.875	V
		KB5819W $I_F = 1A$ $I_F = 3A$		0.6 0.9	V
Diode capacitance	C_D	$V_R = 4V, f = 1MHz$		120	pF

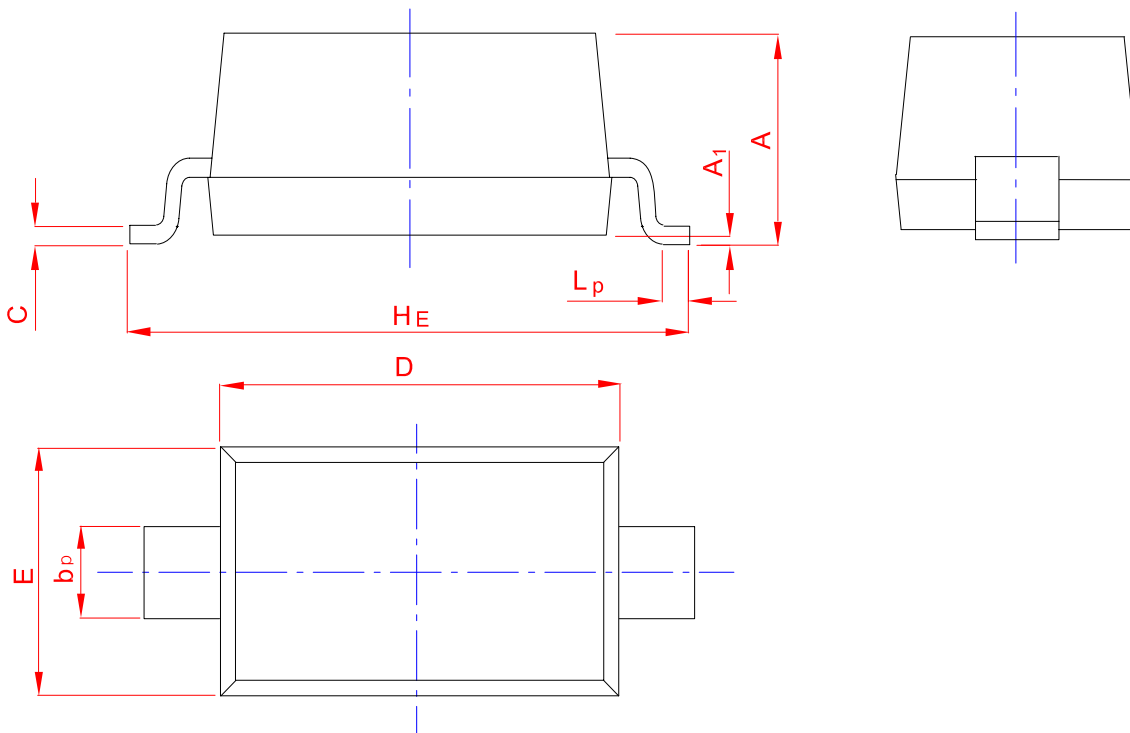
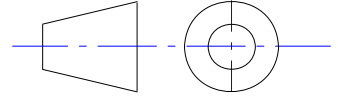
Typical Characteristics



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	0.60	0.135	2.75	1.65	3.85	0.10	0.50
	0.90	0.50	0.100	2.55	1.55	3.55	0.01	0.20