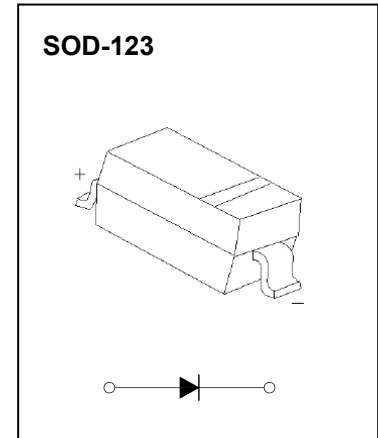


FEATURES

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

MARKING: K1N5817HW-7-F : SJ
K1N5818HW-7-F : SK
K1N5819HW-7-F : SL



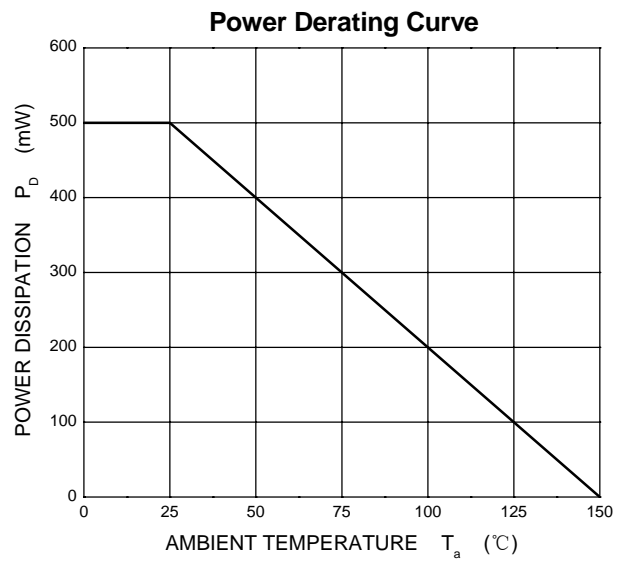
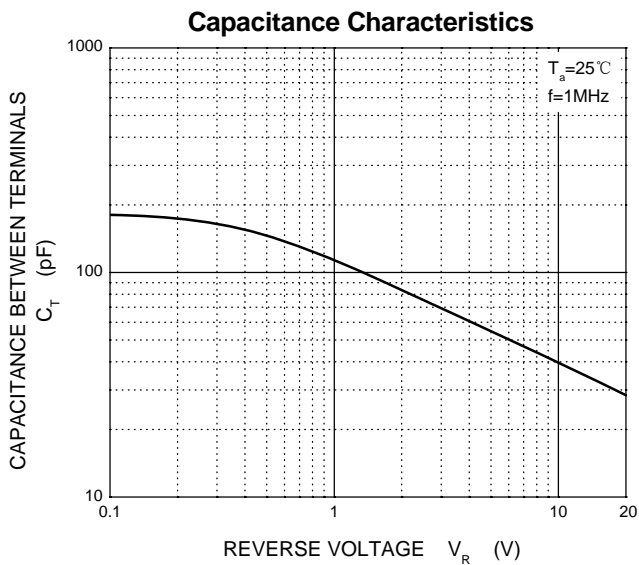
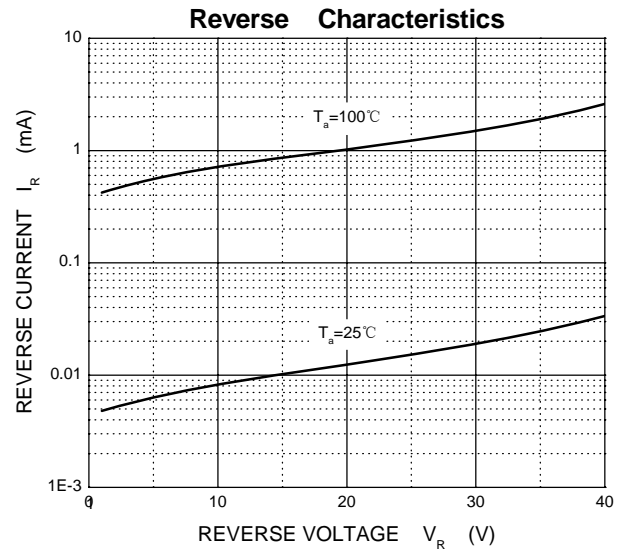
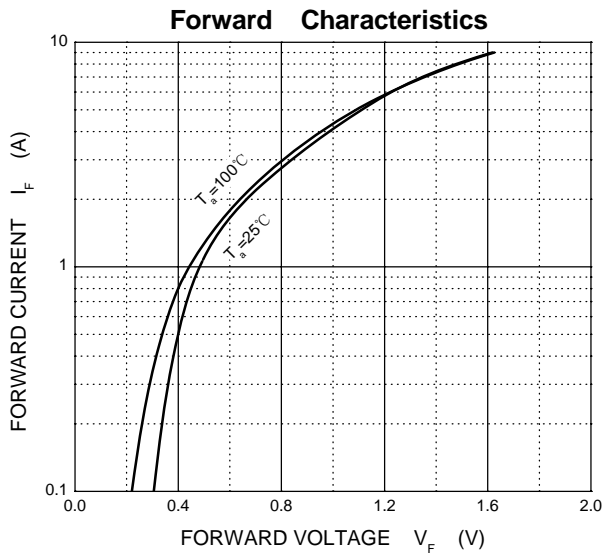
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	K1N5817HW-7-F	K1N5818HW-7-F	K1N5819HW-7-F	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	$V_{(BR)}$	$I_R = 1mA$ K1N5817HW-7-F K1N5818HW-7-F K1N5819HW-7-F	20 30 40		V
Reverse voltage leakage current	I_R	$V_R = 20V$ K1N5817HW-7-F $V_R = 30V$ K1N5818HW-7-F $V_R = 40V$ K1N5819HW-7-F		1	mA
Forward voltage	V_F	K1N5817HW-7-F $I_F = 1A$ $I_F = 3A$		0.45 0.75	V
		K1N5818HW-7-F $I_F = 1A$ $I_F = 3A$		0.55 0.875	V
		K1N5819HW-7-F $I_F = 1A$ $I_F = 3A$		0.6 0.9	V
Diode capacitance	C_D	$V_R = 4V, f = 1MHz$		120	pF

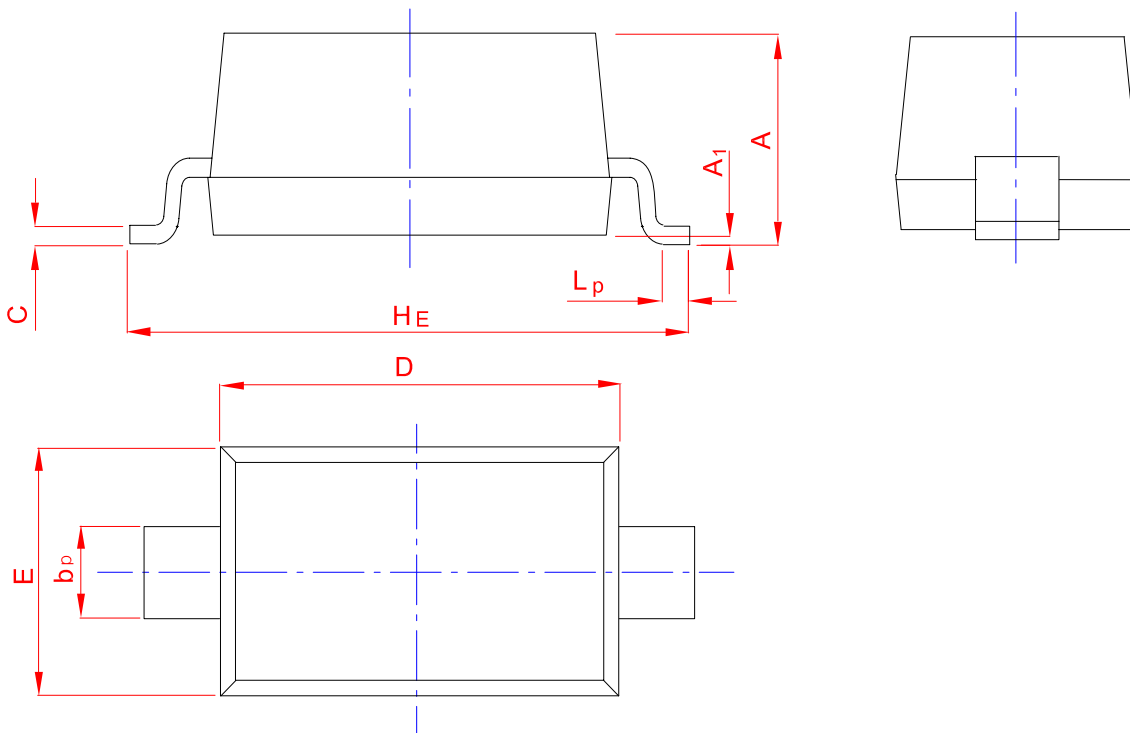
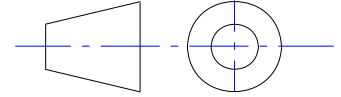
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	bp	C	D	E	HE	A1	Lp
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