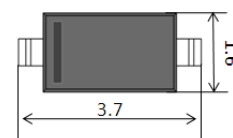


- ◇ Low Forward Voltage Schottky Rectifier
- ◇ High Frequency Inverters
- ◇ RoHS Compliant / Green EMC
- ◇ SOD123 Thin SMD Package
- ◇ Matte Tin (Sn) Lead Finish
- ◇ Cathode Band / Device Marking

Device Marking Code	
K1N5817HW-7-F	SJ
K1N5818HW-7-F	SK
K1N5819HW-7-F	SL

SOD-123 Unit:mm



Maximum Ratings (Ta = 25 °C)

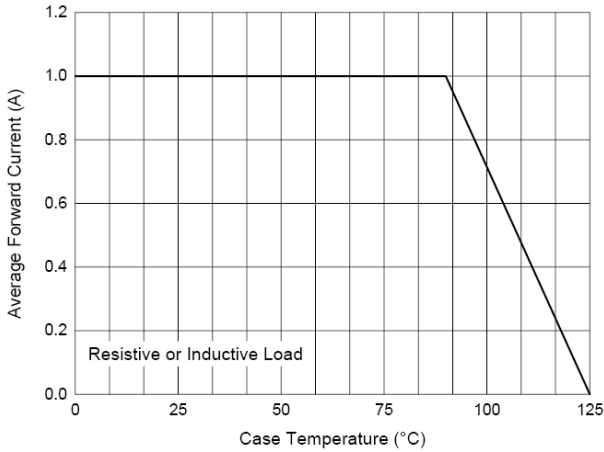
Symbol	Parameter	K1N5817HW	K1N5818HW	K1N5819HW	Units
V_{RM}	Non-Repetitive Peak Reverse Voltage	20	30	40	V
V_{RRM}	Repetitive Peak Reverse Voltage	20	30	40	V
$V_{R(RMS)}$	RMS Reverse Voltage	14	21	28	V
I_O	Average Rectified Output Current	1			A
I_{FSM}	Non-Repetitive Peak Forward Surge Current @8.3mS	10			A
P_D	Power Dissipation	500			mW
T_J	Junction Temperature	125			°C
T_{STG}	Storage Temperature	-55 to +125			°C

*1 8.3 ms single half sine-wave

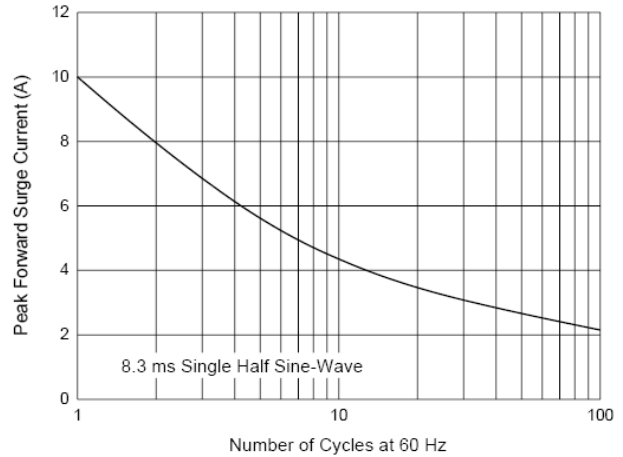
Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
V_F	Forward Voltage	$I_F=1A$	K1N5817HW		0.45	V
			K1N5818HW		0.55	
			K1N5819HW		0.60	
I_R	Reverse Current	$V_R=20V$	K1N5817HW		1	mA
		$V_R=30V$	K1N5818HW		1	
		$V_R=40V$	K1N5819HW		1	
C_J	Typical Junction Capacitance	$V_R=4V, f=1MHZ$		120		pF

Typical Characteristics

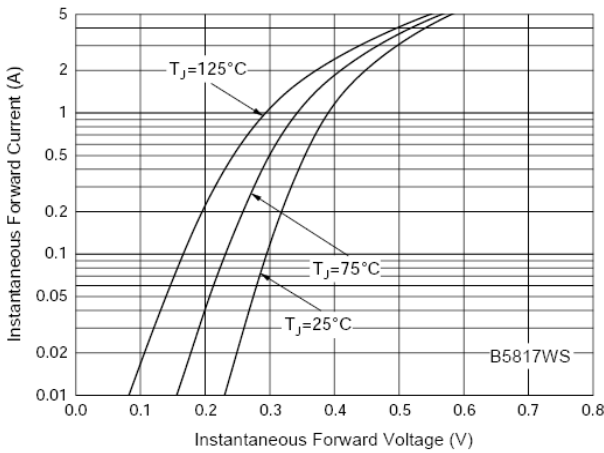


Forward Current Derating Curve

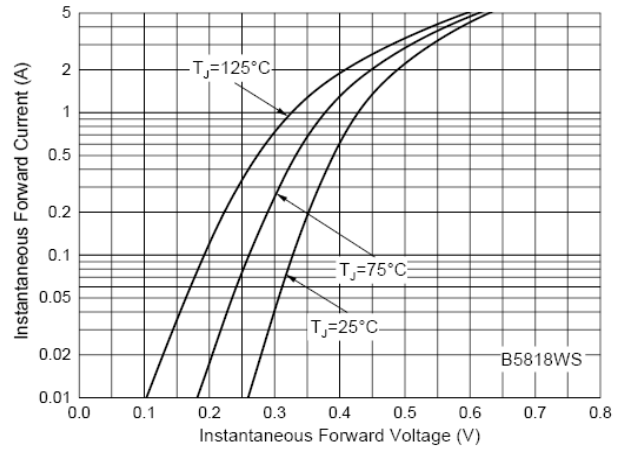


Maximum Non-Repetitive Peak

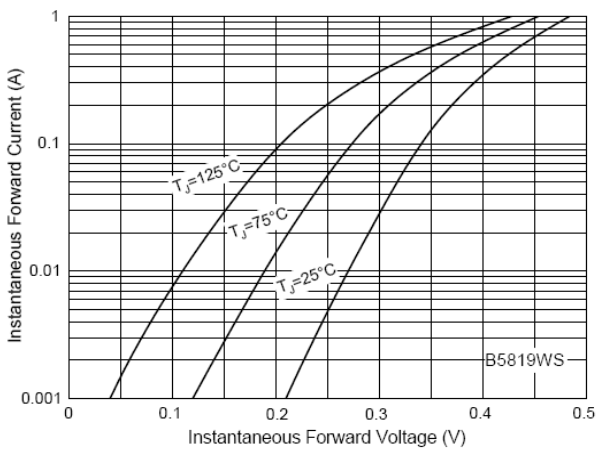
Forward Surge Current



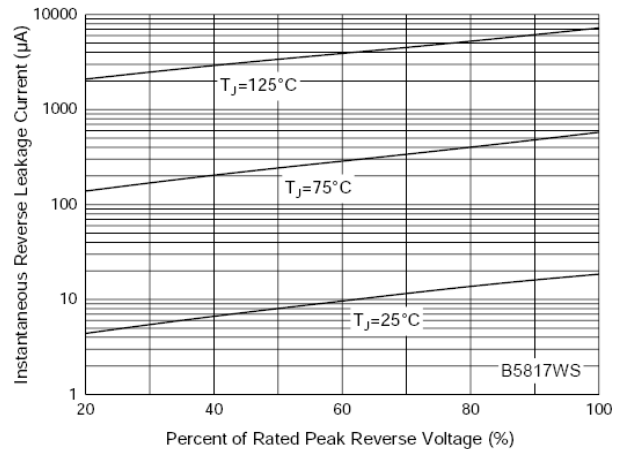
Typical Instantaneous Forward Characteristics



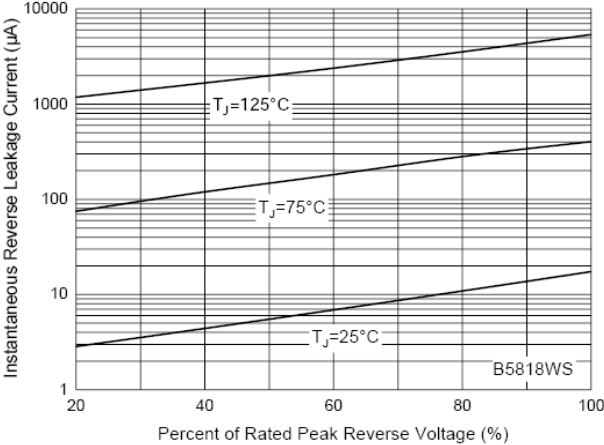
Typical Instantaneous Forward Characteristics



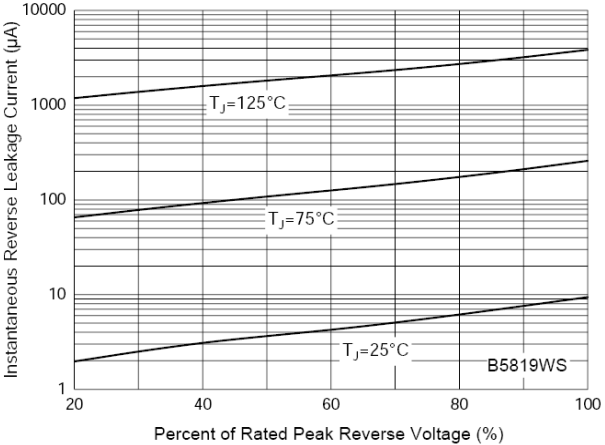
Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics



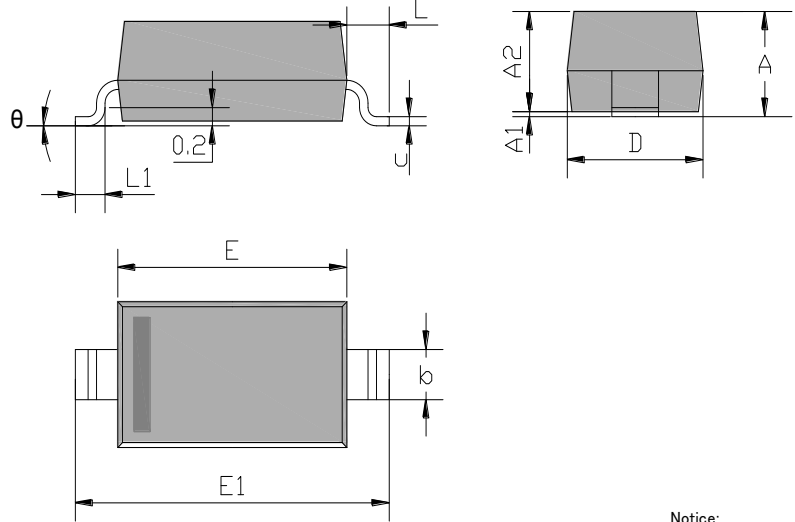
Typical Reverse Leakage Characteristics



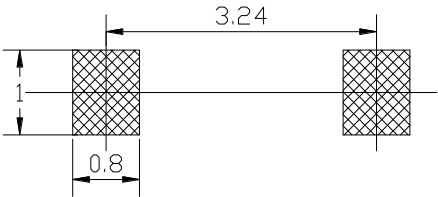
Typical Reverse Leakage Characteristics

Package Dimensions

Package outline : SOD123



SOD123 Package Outline



Land Pattern Recommendation

Symbol	Dimensions in mm	
	Min.	Max.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500 REF.	
L1	0.250	0.450
θ	0°	8°

- Notice:
- 1.Halogen-free,EMC
 - 2.Pb free solder
 - 3.Lead thickness includes solder plating
 - 4.Other Tolerance: ±0.05
 - 5.Dimensions are exclusive of Burrs,Mold Flash and Tie Bar extrusions
 - 6.Unit: mm