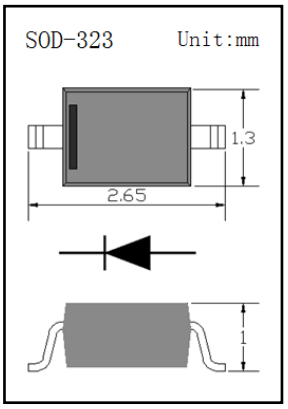
- ◇ Low Forward Voltage Schottky Rectifier
- ◇ High Frequency Inverters
- ◇ Rohs Compliant / Green Emc
- ◇ SOD323 Thin Smd Package
- ◇ Matte Tin (Sn) Lead Finish
- ◇ Cathode Band / Device Marking

Device Marking Code	
K1N5817HWS-7-F	SJ
K1N5818HWS-7-F	SK
K1N5819HWS-7-F	SL



Maximum Ratings (Ta = 25 ℃)

Symbol	Parameter	K1N5817HWS	K1N5818HWS	K1N5819HWS	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	200			mW
T_J	Junction Temperature	125			℃
T_{STG}	Storage Temperature	-55 to +125			℃

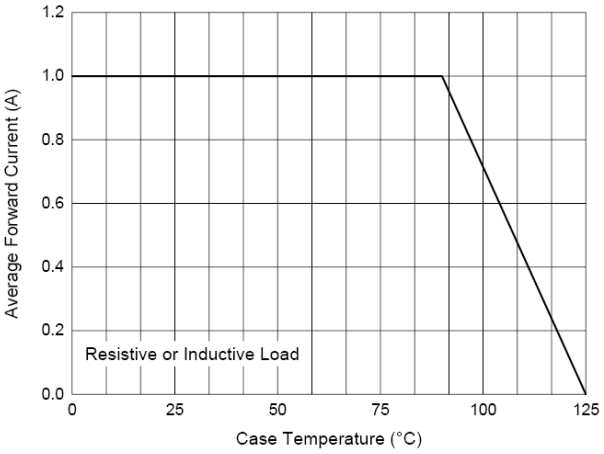
*1 8.3 ms single half sine-wave

Electrical Characteristics (Ta = 25 ℃)

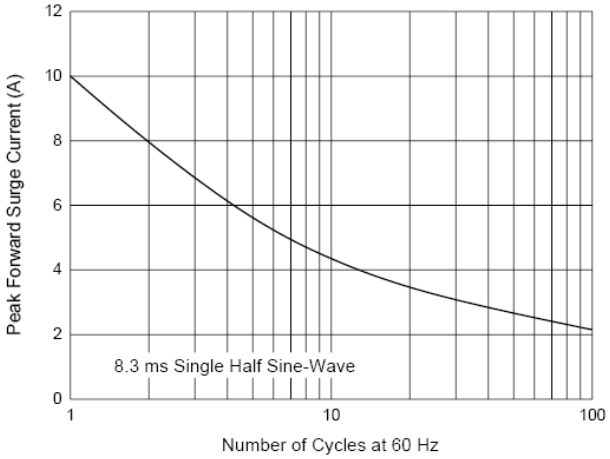
Symbol	Parameter	Test Conditions		Min	Typ	Max	Units
V_F	Forward Voltage	I_F=1A	K1N5817HWS			0.45	V
			K1N5818HWS			0.55	
			K1N5819HWS			0.60	
		I_F=3A	K1N5817HWS			0.75	V
			K1N5818HWS			0.875	
			K1N5819HWS			0.90	
I_R	Reverse Current	V_R=20V	K1N5817HWS			1	mA
		V_R=30V	K1N5818HWS			1	
		V_R=40V	K1N5819HWS			1	

Symbol	Parameter	Test Conditions		Min	Typ	Max	Units
C_J	Typical Junction Capacitance	V_R=4.0V,1.0MH$_Z$	K1N5817HWS			80	pF
		V_R=10V,1.0MH$_Z$				50	
		V_R=4.0V,1.0MH$_Z$	K1N5818HWS			48	
		V_R=10V,1.0MH$_Z$	K1N5819HWS			32	

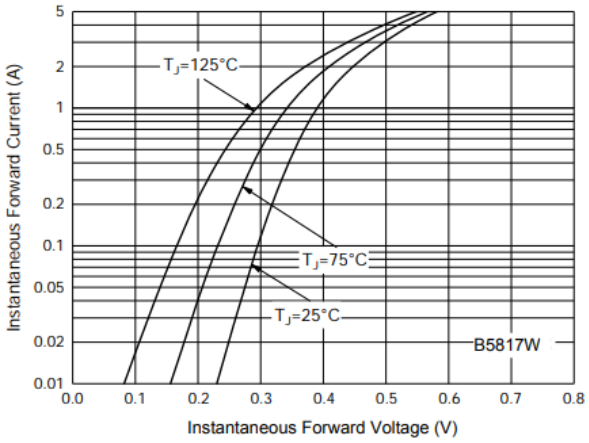
Curve Characteristics



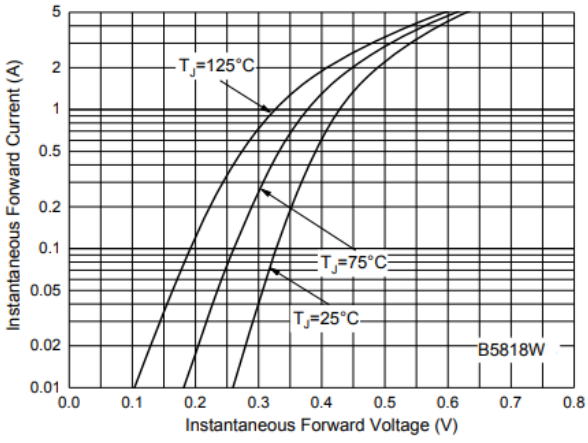
Forward Current Derating Curve



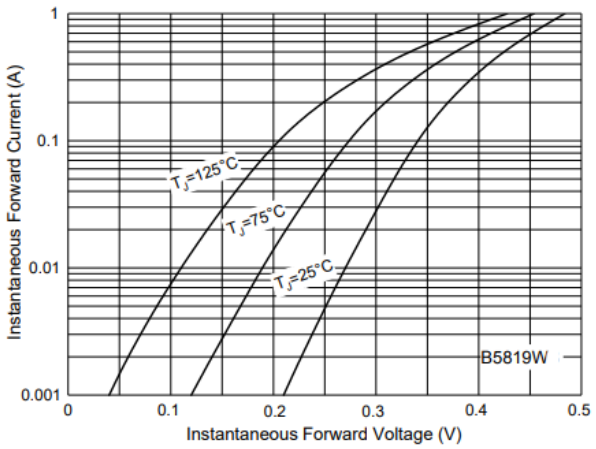
Maximum Non-Repetitive Peak Forward Surge Current



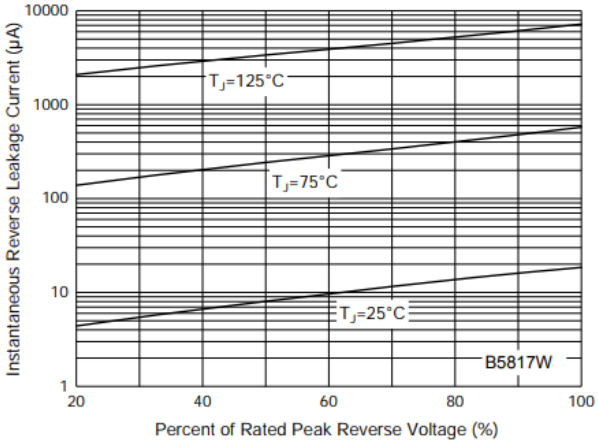
Typical Instantaneous Forward Characteristics



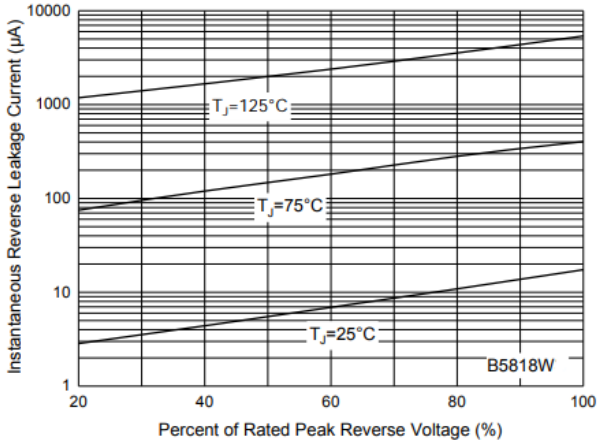
Typical Instantaneous Forward Characteristics



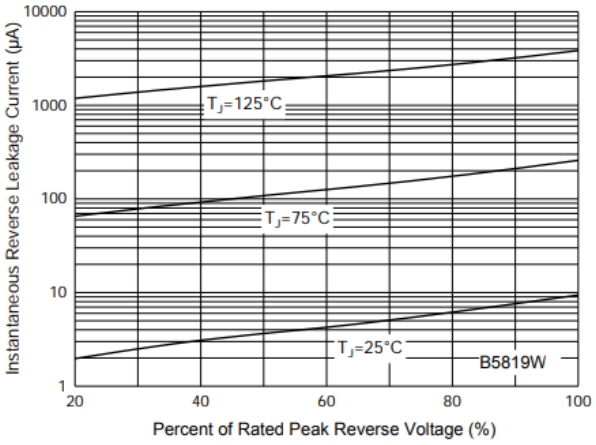
Typical Instantaneous Forward Characteristics



Typical Reverse Leakage Characteristics



Typical Reverse Leakage Characteristics

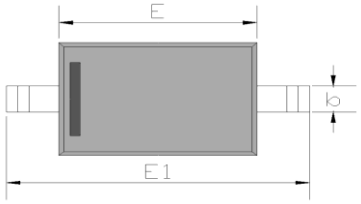


Typical Reverse Leakage Characteristics

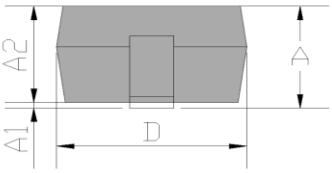
Package Dimensions

Package outline : SOD-323

Top View

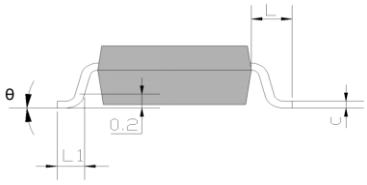


Side View

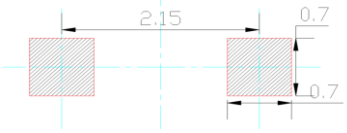


Symbol	Dimensions in mm	
	Min.	Max.
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475 REF.	
L1	0.250	0.400
θ	0°	8°

Front View



Soldering Pattern



Notice:

2.Lead plating: Pb free solder
3.Lead thickness includes solder plating
4.Other Tolerance: ±0.05
5.Unit: mm