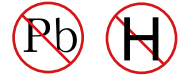




SOD-123 SURFACE MOUNT
Small Outline Gull Wing Lead Plastic Package
Schottky Barrier Diode



Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	500	mW
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
V_{RM}	Repetitive Peak Reverse Voltage	40	V
I_o	Average Rectified Output Current	1	A
I_{FSM}	Peak Forward Surge Current ($t=8.3\text{ms}$ Single Half Sine-wave)	9	A
I_{FRM}	Repetitive Peak Forward Current	1.5	A

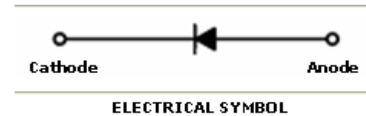


SOD-123 Gull Wing Lead

These ratings are limiting values above which the serviceability of the diode may be impaired.

Specification Features:

- For use in low voltage, high frequency inverters, free wheeling & polarity protection...
- Gull Wing Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode
- Weight: approx. 0.01g



DEVICE MARKING CODES:

Device Type	Device Marking
B5819W	SL

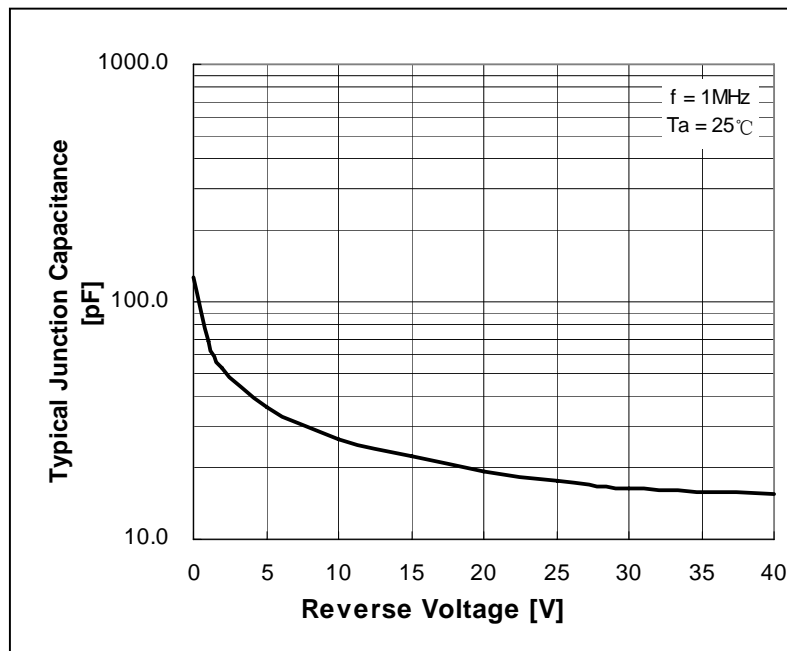
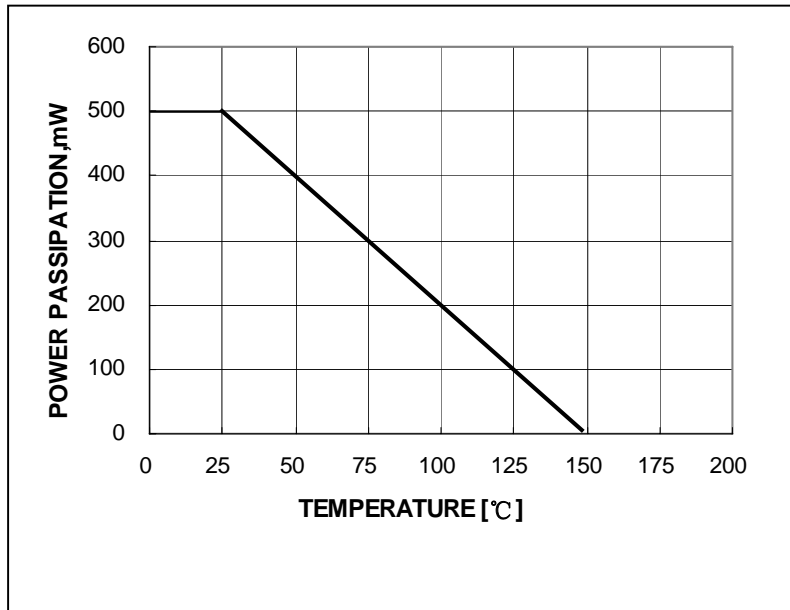
Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Limits			Unit
			Min	Typ	Max	
V_{BR}	Reverse Breakdown Voltage	$I_R=1\text{mA}$	40	--	-	Volts
I_R	Reverse Leakage Current	$V_R=40\text{V}$	--	--	1	mA
V_F	Forward Voltage	$I_F=1\text{A}$ $I_F=3\text{A}$	--	--	0.60 0.90	Volts
C_d	Diode Capacitance	$V_R=4\text{V}$ $f=1\text{MHz}$	--	--	120	pF

DEVICE CHARACTERISTICS

B5819W

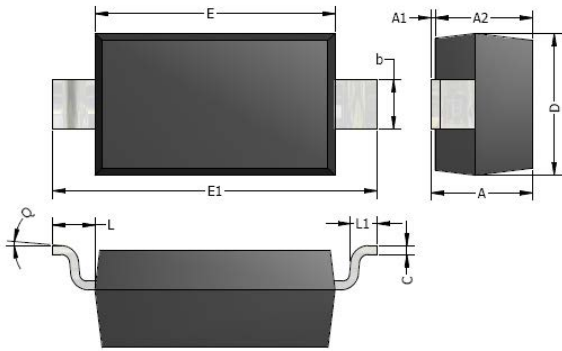
RATING AND CHARACTERISTIC CURVES



PACKAGE OUTLINE & DIMENSIONS

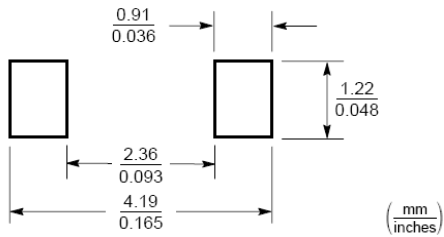
B5819W

SOD-123 Gull Wing Lead Package Outline



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.05	1.25	0.041	0.049
A1	0.00	0.10	0.000	0.004
A2	1.05	1.15	0.041	0.045
b	0.50	0.70	0.020	0.028
c	0.08	0.15	0.003	0.006
D	1.50	1.70	0.059	0.067
E	2.60	2.80	0.102	0.110
E1	3.55	3.85	0.140	0.152
L	0.50 REF.		0.020 REF.	
L1	0.25	0.45	0.010	0.018
θ	0°	8°	0°	8°

Typical Soldering Pattern:



Note:

Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.