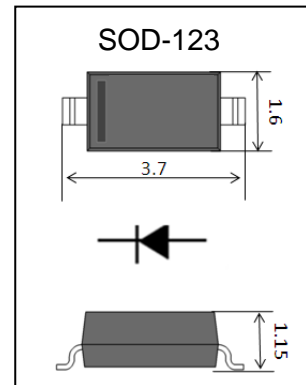


## Schottky Diodes

- ◇ Low Forward Voltage Schottky Rectifier
- ◇ RoHS compliant / Green EMC
- ◇ Matte Tin (Sn) Lead finish
- ◇ Moisture Level Sensitivity 1
- ◇ Cathode Band / Device marking

Device Marking Code	
B5819W	SL •



※Mark: refer to Device Marking

### Maximum Ratings (Ta = 25 °C)

Symbol	Parameter	Value	Units
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	40	V
$V_{RRM}$	Repetitive Peak Reverse Voltage	40	V
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
$I_O$	Average Rectified Output Current	1	A
$I_{FSM}$	Non-Repetitive Peak Forward Surge Current*1	9	A
$I_{FRM}$	Repetitive Peak Forward Current	1.5	A
$P_D$	Power Dissipation	500	mW
$T_J$	Junction Temperature	125	°C
$T_{STG}$	Storage Temperature	-65 to +150	°C

\*1 8.3 ms single half sine-wave

### Electrical Characteristics (Ta = 25 °C)

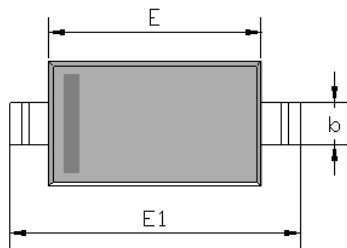
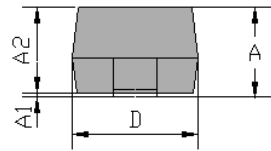
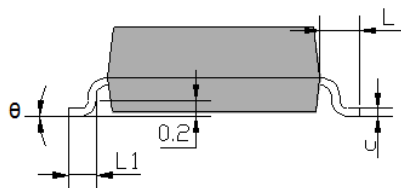
Symbol	Parameter	Test Conditions	Min	Max	Units
$V_F$	Forward Voltage	$I_f=1A$		0.6	V
		$I_f=3A$		0.9	V
$V_{BR}$	Reverse breakdown voltage	$I_R=1mA$	40		V
$I_R$	Reverse voltage leakage current	$V_R=20V$		1	mA
$C_D$	Diode capacitance	$V_R=4V, f=1MHz$		120	pF

**Ordering Information**

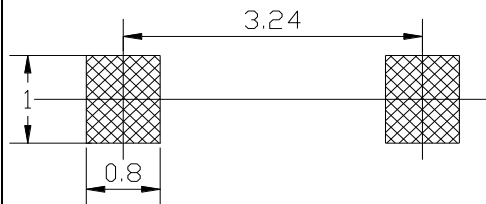
Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
B5819W	SOD-123	Tape & Reel 3000pcs /7" Reel	8 mm	4 mm	Conductive	

**Package Dimensions**

Package outline : SOD-123



Unit	A	A1	A2	b	c	D	E	E1	L	L1	$\theta$
Max.	1.25	0.10	1.15	0.65	0.15	1.70	2.80	3.85	0.500 REF.	0.45	8°
Min.	1.05	0.00	1.05	0.45	0.08	1.50	2.60	3.55		0.25	0°

**SOD123 Package Outline**

**Land Pattern Recommendation**
**Note:**

1. Halogen free, EMC
2. Pb free solder
3. Lead thickness includes solder plating
4. Lead frame: A42
5. Other Tolerance:  $\pm 0.05$
6. Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions
7. Unit: mm