

## BAT46WX

### Schottky Diode

#### FEATURE

- Low Forward Voltage Schottky Rectifier
- RoHS compliant / Green EMC
- SOD323-GW Thin SMD package
- Matte Tin (Sn) Lead finish
- Cathode Band / Device marking

**MARKING:**     **S9**

SOD-323GW



Schematic diagram



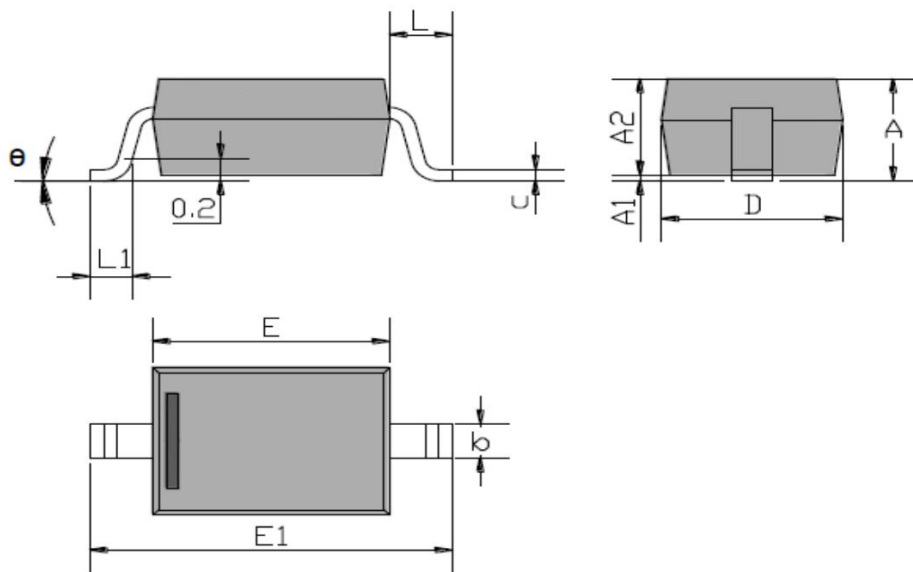
#### ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak repetitive peak reverse voltage	V <sub>RWM</sub>	100	V
Working peak reverse voltage	V <sub>RWM</sub>	100	V
Repetitive peak forward current (Note 1) @ tp < 1.0s, Duty Cycle < 50%	I <sub>FRM</sub>	150	mA
Non-repetitive Peak Forward surge current @ t = 8.3ms	I <sub>FSM</sub>	350	mA
Power Dissipation	P <sub>D</sub>	750	mW
Thermal resistance junction to ambient air	R <sub>θJA</sub>	200	°C/W
Junction Temperature	T <sub>J</sub>	500	°C
Storage Temperature	T <sub>STG</sub>	125	°C

#### ELECTRICAL CHARACTERISTICS(T<sub>a</sub>=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse breakdown voltage	V <sub>BR</sub>	I <sub>R</sub> =100μA	100			V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 0.1mA			250	mV
		I <sub>F</sub> = 1.0mA			450	mV
		I <sub>F</sub> = 250mA			1000	mV
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 1.5V			0.3	μA
		V <sub>R</sub> = 10V			0.5	μA
		V <sub>R</sub> = 50V			1	μA
		V <sub>R</sub> = 75V			2	μA
Diode Capacitance	C <sub>T</sub>	V <sub>R</sub> = 0V, f = 1MHz		20		pF
		V <sub>R</sub> = 1V, f = 1MHz		12		pF

**SOD-323GW Package Information**



Symbol	Dimensions In Millimeters		
	Min	Typ	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
$\theta$	0°	-	8°

1.Unit mm