



# SD103AWS thru SD103CWS

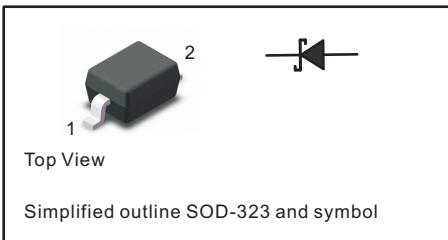
## Surface Mount Schottky Barrier Diode

### Features

- Low Capacitance
- Low Forward Voltage

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage SD103AWS SD103BWS SD103CWS	V <sub>RRM</sub>	40	V
		30	
		20	
Reverse Voltage SD103AWS SD103BWS SD103CWS	V <sub>R</sub>	40	V
		30	
		20	
Average Forward Rectified Current	I <sub>F(AV)</sub>	350	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	13	A
Power Dissipation	P <sub>tot</sub>	200	mW
Junction Temperature Range	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to + 150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at I <sub>R</sub> = 100 µA SD103AWS SD103BWS SD103CWS	V <sub>BR</sub>	40	-	-	V
		30	-	-	
		20	-	-	
Reverse Leakage Current at V <sub>R</sub> = 30 V at V <sub>R</sub> = 20 V at V <sub>R</sub> = 10 V SD103AWS SD103BWS SD103CWS	I <sub>R</sub>	-	-	5	µA
		-	-	5	
		-	-	5	
Forward Voltage at I <sub>F</sub> = 20 mA at I <sub>F</sub> = 200 mA SD103AWS SD103BWS SD103CWS	V <sub>F</sub>	-	-	0.37 0.6	V
		-	-	0.37 0.6	
		-	-	0.37 0.6	
Total Capacitance at V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>T</sub>	-	50	-	pF
Reverse Recovery Time at I <sub>F</sub> = I <sub>R</sub> = 200 mA, I <sub>rr</sub> = 0.1 I <sub>R</sub> , R <sub>L</sub> = 100 Ω	t <sub>rr</sub>	-	10	-	ns



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### Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

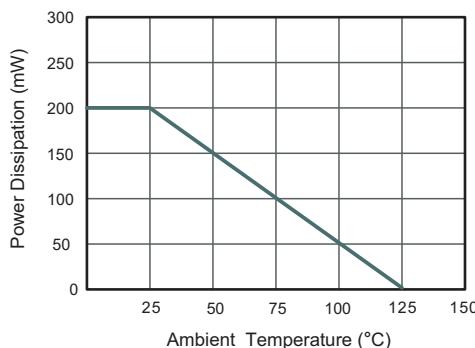


Fig.2 Typical Reverse Characteristics

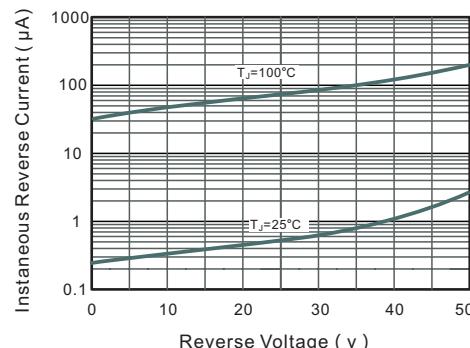


Fig.3 Forward Characteristics

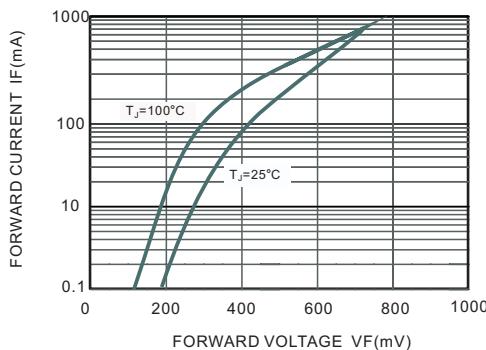


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

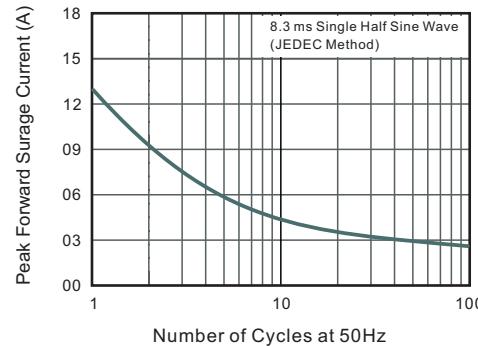


Fig.5 Typical Junction Capacitance

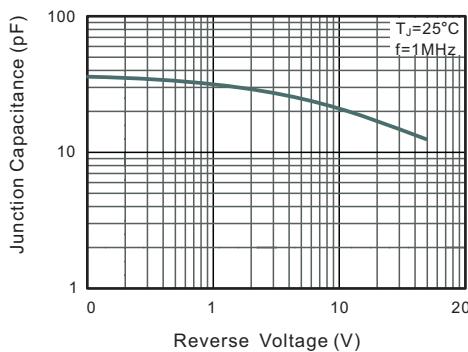
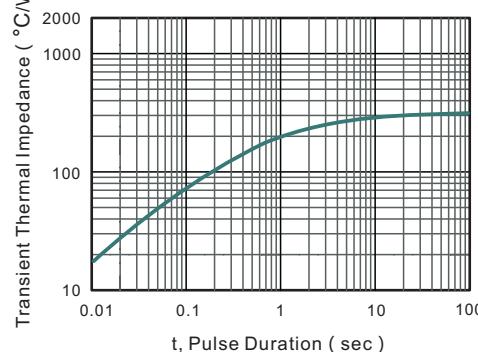


Fig.6 Typical Transient Thermal Impedance



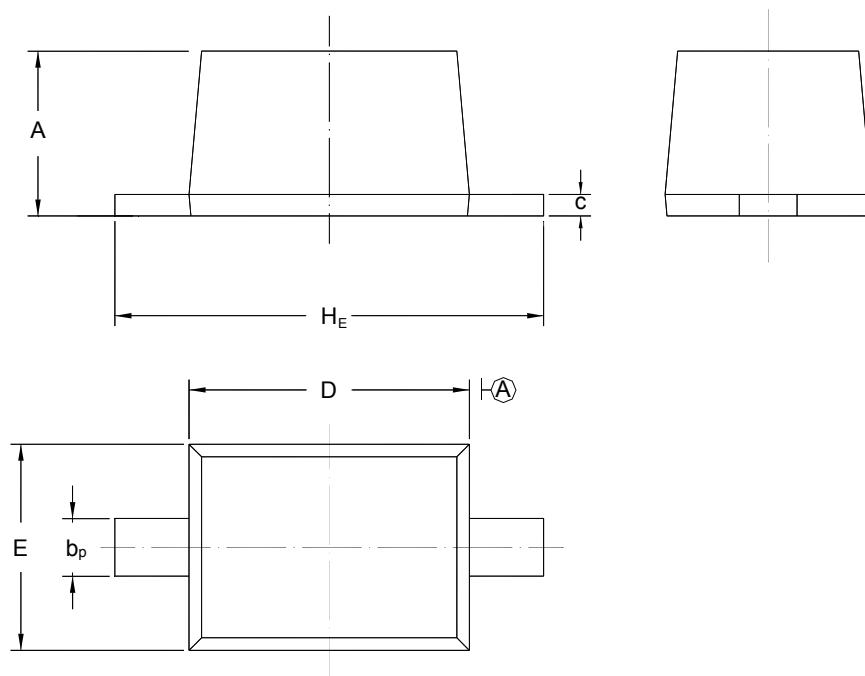


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### Package Outline

SOD-323



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>
mm	1.10 0.80	0.40 0.25	0.15 0.08	1.80 1.40	1.40 1.20	2.75 2.55