

# SOD- 323 Plastic-Encapsulate Schottky Barrier Diode

### **Features**

- High Current Capability
- Low Forward Voltage Drop

### **Mechanical Data**

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any





Marking: S9 SOD-323

Maximum Ratings & Thermal Characteristics (T <sub>A</sub> =25°C unless otherwise noted)			
Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	100	V
Non-repetitive Peak Forward Current	I <sub>FM</sub>	350	mA
Peak forward surge current 8.3 ms single half sine-wave	I <sub>FSM</sub>	750	mA
Power Dissipation	PD	200	mW
Typical thermal resistance	$R_{ extsf{ heta}JA}$	500	°C <b>/W</b>
Storage temperature range	T <sub>STG</sub>	-55-+150	°C
Junction temperature	TJ	125	°C

Electrical Characteristics (T <sub>A</sub> =25°C unless otherwise noted)	
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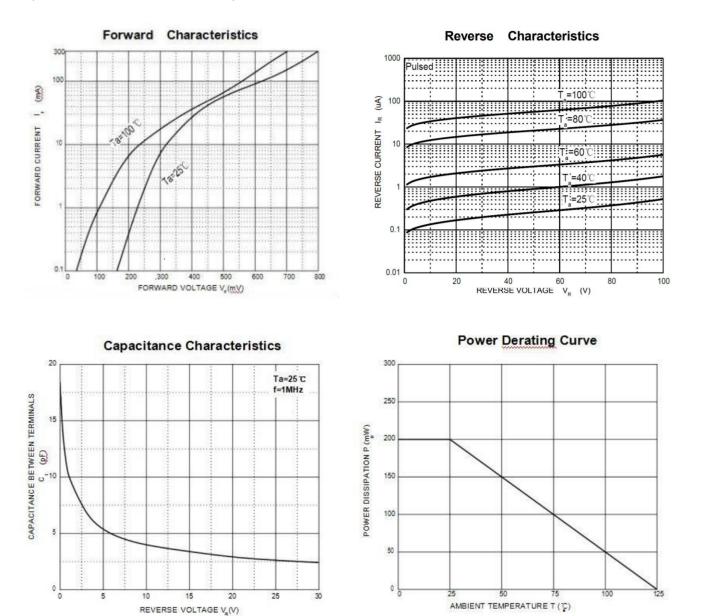
Parameter	Symbols Test Condition	Limits				
		Test Condition	Min	Тур	Max	Unit
Maximum reverse breakdown voltage	Vr	IR=100uA	100			V
Maximum reverse current	IR@25℃	VR=1.5V			0.3	uA
		VR=10V			0.5	
		VR=50V			1.0	
		VR=75V			2.0	
	<b>IR@70</b> ℃	VR=1.5V			12	uA
		VR=10V			20	
		VR=50V			44	
		VR=75V			80	
Maximum forward voltage	VF	IF=0.1mA			250	mV
		IF=10mA			450	
		IF=250mA			1000	
Type junction capacitance	C j	VR=0V, f=1MHZ			20	pF
		VR=1.0V, f=1MHZ			12	pF
Reverse Recovery Time	T <sub>RR</sub>	IF=10mA to IR=10mA, RL=100Ω, measured at Ir=1mA			4	nS



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### **Ratings and Characteristics Curves**

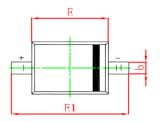
(TA = 25°C unless otherwise noted)

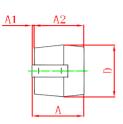


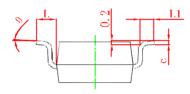


### Package Outline Dimensions

millimeters







Symbol	Min	Max	
Α		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	
Е	1.600	1.800	
E1	2.500	2.700	
L	0.475REF		
L1	0.250	0.400	
θ	0°	8º	

## **Revision History**

Document Version	Date of release	Description of changes
Rev.A	2015.04.10	First issue



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