

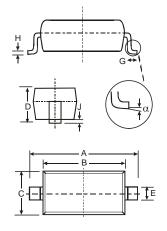
# SD103AW-SD103CW

### SCHOTTKY BARRIER DIODE

### **Features**

- Low Forward Voltage Drop.
- Guard Ring Construction for Transient Protection.
- Negligible Reverse Recovery Time.
- Very Low Reverse Capacitance

DEVICE	MARKING			
SD103AW	S4			
SD103BW	S5			
SD103CW	S6			



SOD-123					
Dim	Min	Max			
Α	3.55	3.85			
В	2.55	2.85			
С	1.40	1.70			
D	_	1.35			
E	0.45	0.65			
	0.55 Typical				
G	0.25	_			
Н	0.11 Typical				
J		0.10			
α	0°	8°			
All Dimensions in mm					

### Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Symbol	Parameter		Unit		
	Farameter	SD103AW	SD103BW	SD103CW	Oill
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	40	30	20	V
V <sub>RWM</sub>	Working Peak Reverse Voltage	40			V
V <sub>R(RMS)</sub>	RMS Reverse Voltage	28	21	14	V
I <sub>FM</sub>	Forward Continuous Current	350			mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current@t=8.3ms	2			Α
P <sub>D</sub>	Power Dissipation	400			mW
R <sub>OJA</sub>	Thermal Resistance from Junction to Ambient	250		°C/W	
Tj	Junction Temperature	125			$^{\circ}$
T <sub>stg</sub>	Storage Temperature	-55~+150			$^{\circ}$

## Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

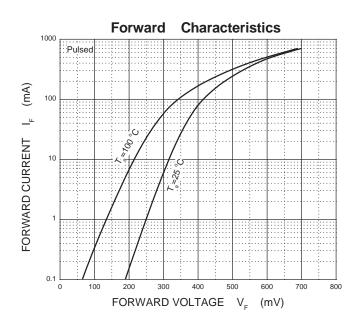
Parameter	Symbol	Test conditions		Min	Тур	Max	Unit
		I <sub>R</sub> =100μA	SD103AW	40			
Reverse voltage	$V_{(BR)}$		SD103BW	30			V
			SD103CW	20			
Reverse current		V <sub>R</sub> =30V	SD103AW				
	I <sub>R</sub>	V <sub>R</sub> =20V	SD103BW			5	μΑ
		V <sub>R</sub> =10V	SD103CW				
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =20mA				0.37	V
		I <sub>F</sub> =200mA				0.6	V
Total capacitance	C <sub>tot</sub>	V <sub>R</sub> =0V,f=1MHz			50		pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> =200mA, I <sub>rr</sub> =0	).1×I <sub>R</sub> , R <sub>L</sub> =100Ω		10		ns

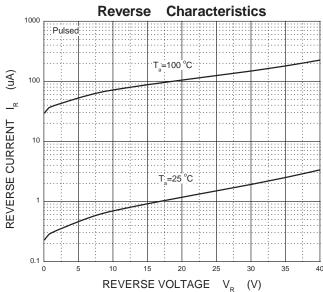


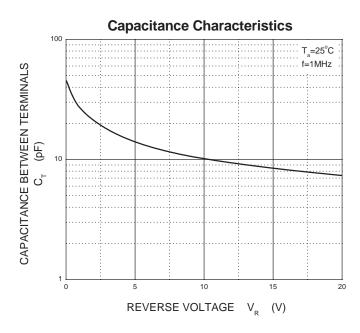
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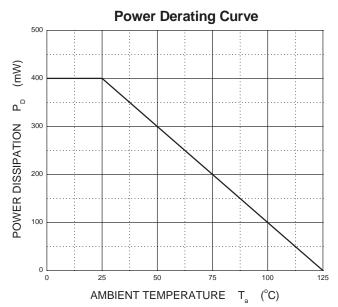
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### **TYPICAL TRANSIENT CHARACTERISTICS**









http://www.hc-semi.com



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