



Dimensions in inches and (millimeters)

### FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance
- Pb-Free package is available
- RoHS product for packing code suffix "G"
- Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1
- Polarity: Color band denotes cathod end

<b>MARKING:</b>	<b>SD103AW:</b>	<b>S4</b>
	<b>SD103BW:</b>	<b>S5</b>
	<b>SD103CW:</b>	<b>S6</b>

**SD103xW****SCHOTTKY BARRIER DIODE**

Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise noted)					
Parameter	Symbol	Value			Unit
		SD103AW	SD103BW	SD103CW	
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	40	30	20	V
Working Peak Reverse Voltage	$V_{RWM}$				
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	$I_{FM}$	350			mA
Non-repetitive Peak Forward Surge Current @ $t \leq 1\text{s}$	$I_{FRM}$	2			A
Power Dissipation	$P_D$	400			mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	250			$^\circ\text{C/W}$
Operating Temperature	$T_J$	-55~+125			$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55~+150			$^\circ\text{C}$

Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)						
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	SD103AW	$I_R=100\mu\text{A}$	40	—	—	V
	SD103BW		30	—	—	
	SD103CW		20	—	—	
Forward Voltage	$V_F$	$I_F=20\text{mA}$	—	—	0.37	V
		$I_F=200\text{mA}$	—	—	0.60	
Reverse Current	SD103AW	$V_R=30\text{V}$	—	—	5	$\mu\text{A}$
	SD103BW	$V_R=20\text{V}$	—	—		
	SD103CW	$V_R=10\text{V}$	—	—		
Total Capacitance	$C_T$	$V_R=0\text{V}$ , $f=1\text{MHz}$	—	50	—	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=200\text{mA}$ $I_{rr}=0.1I_R$ , $R_L=100\Omega$	—	10	—	ns

### Typical Characteristics

