



Dimensions in inches and (millimeters)

### FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Low Reverse Recovery Time
- Low Reverse 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

**MARKING: S4**

**SD103AX****SCHOTTKY BARRIER DIODE**

<b>Maximum Ratings (<math>T_a=25^\circ\text{C}</math> unless otherwise noted)</b>			
<b>Parameter</b>	<b>Symbol</b>	<b>Limit</b>	<b>Unit</b>
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Forward Continuous Current	$I_O$	350	mA
Repetitive Peak Forward Current @ $t \leq 1\text{s}$	$I_{FRM}$	1	A
Non-Repetitive Peak Forward Surge Current @ 8.3ms Half Sine Wave	$I_{FSM}$	15	
Power Dissipation	$P_D$	150	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	667	$^\circ\text{C/W}$
Operating Temperature	$T_J$	-55~+125	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-55~+150	$^\circ\text{C}$

<b>Electrical Characteristics (<math>T_a=25^\circ\text{C}</math> unless otherwise noted)</b>						
<b>Parameter</b>	<b>Symbol</b>	<b>Test conditions</b>	<b>Min.</b>	<b>Typ.</b>	<b>Max.</b>	<b>Unit</b>
Reverse Voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	40	—	—	V
Reverse Current	$I_R$	$V_R=30\text{V}$	—	—	5	$\mu\text{A}$
		$V_R=20\text{V}$	—	—	2	
		$V_R=10\text{V}$	—	—	1	
Forward Voltage	$V_F$	$I_F=1\text{mA}$	—	0.27	—	V
		$I_F=5\text{mA}$	—	0.32	—	
		$I_F=20\text{mA}$	—	—	0.37	
		$I_F=200\text{mA}$	—	—	0.60	
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

