

Dimensions in inches and (millimeters)

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- 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:	SD103AWS:	S4
	SD103BWS:	S5
	SD103CWS:	S6



SD103xWS



SCHOTTKY BARRIER DIODE

Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)					
Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	40	30	20	V
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current	I_{FM}		350		mA
Repetitive Peak Forward Current @ $t \leq 1.0\text{s}$	I_{FRM}		1.5		A
Power Dissipation	P_D		200		mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$		500		$^{\circ}\text{C/W}$
Operating Temperature	T_J		-55~+125		$^{\circ}\text{C}$
Storage	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	SD103AWS	$I_R=100\mu\text{A}$	40	—	—	V
	SD103BWS		30	—	—	
	SD103CWS		20	—	—	
Forward Voltage	V_F	$I_F=20\text{mA}$	—	—	0.37	V
		$I_F=200\text{mA}$	—	—	0.60	
Reverse Current	SD103AWS	$V_R=30\text{V}$	—	—	5	μA
	SD103BWS	$V_R=20\text{V}$	—	—		
	SD103CWS	$V_R=10\text{V}$	—	—		
Total Capacitance	C_T	$V_R=0\text{V}$, $f=1\text{MHz}$	—	—	50	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=200\text{mA}$ $I_{tr}=0.1X I_R$, $R_L=100\Omega$	—	10	—	ns

Typical Characteristics

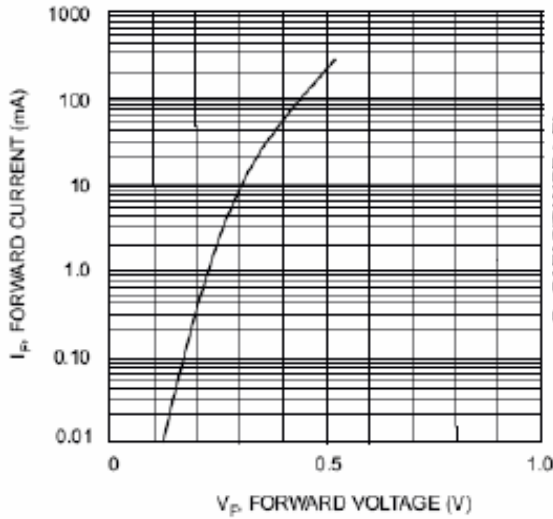


Fig. 1 Typical Forward Characteristics

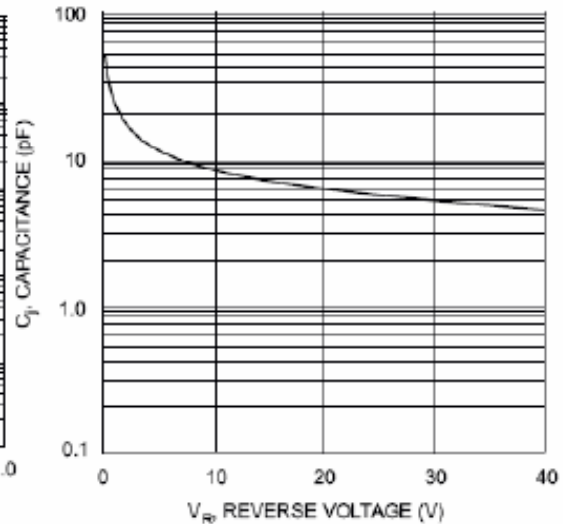


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

