

II. Schottky Rectifier

350mA Surface Mount Schottky Rectifier

SD103AWS/SD103BWS/SD103CWS

(Package: SOD-323)

<p><u>FEATURES</u></p> <ul style="list-style-type: none"> • Low forward voltage drop • Guard ring construction for transient protection • High conductance <p><u>MECHANICAL DATA</u></p> <ul style="list-style-type: none"> • Case : Molded plastic, SOD-323 • Mounting position : Any • Polarity : Color band denotes cathode <p><u>DEVICE MARKING CODE</u></p> <ul style="list-style-type: none"> • SD103AWS : S4 • SD103BWS : S5 • SD103CWS : S6 	<p>Case: SOD-323 Dimensions in millimeters</p>
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Ratings & Electrical Characteristics

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Peak reverse voltage	V _{RRM}				
Working Peak DC Reverse Voltage	V _{RWM}	40	30	20	V
V _R					
RMS Reverse Voltage	V _{R(RMS)}	28	21	14	V
Forward Continuous Current	I _F	350			mA
Repetitive Peak Forward Current @t≤1.0s	I _{FSM}	1.5			A
Power Dissipation	P _d	200			mW
Thermal Resistance Junction to Ambient	R _{θJA}	625			°C/W
Storage temperature	T _{stg}	-65 to +125			°C

Elect. Characteristic and Rating Curves of SD103AWS~SD103CWS

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage SD103AWS SD103BWS SD103CWS	$V_{(BR)R}$	40			V	$I_R=100\mu A$
		30				$I_R=100\mu A$
		20				$I_R=100\mu A$
Forward voltage	V_F			0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	I_{RM}			5.0	μA	$V_R=30V$ $V_R=20V$ $V_R=10V$
Junction Capacitance	C_J		28		pF	$V_R=0, f=1MHz$
Reverse Recovery Time	t_{rr}		10		ns	$I_R=I_F=200mA$ $I_{rr}=0.1*I_R, R_L=100\Omega$

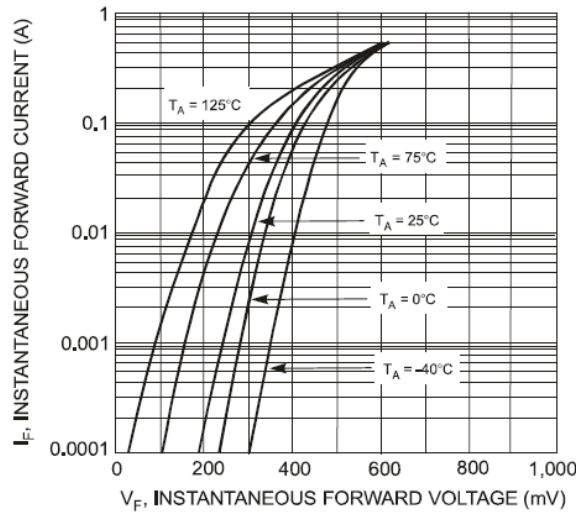


Fig. 1 Typical Forward Characteristics

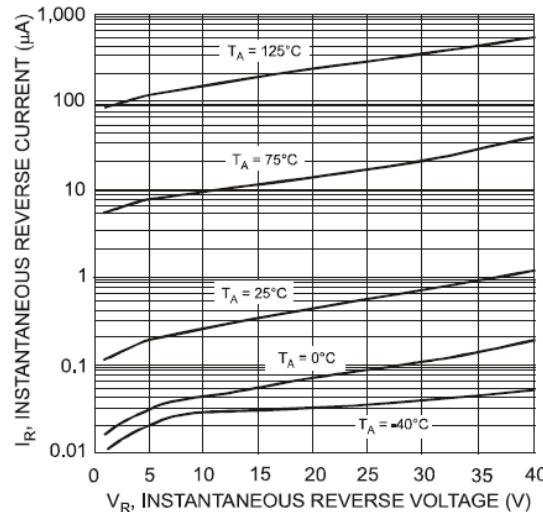


Fig. 2 Typical Reverse Characteristics

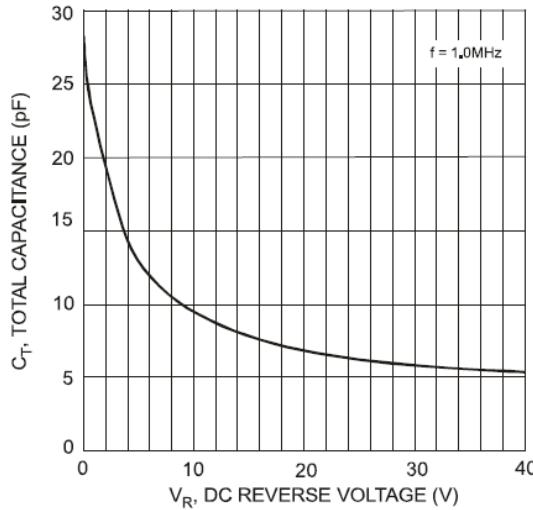


Fig. 3 Total Capacitance vs. Reverse Voltage

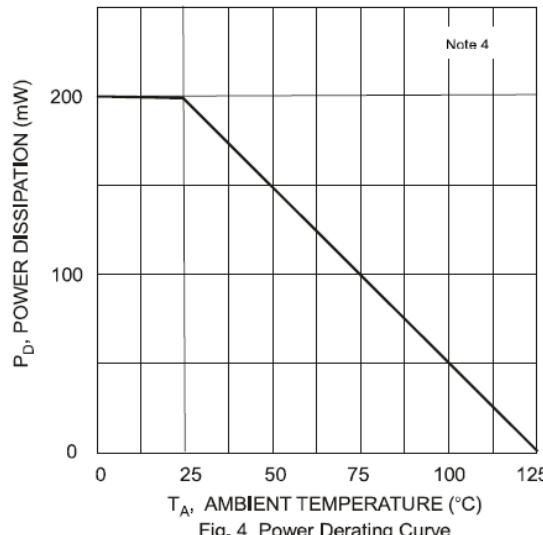


Fig. 4 Power Derating Curve