

## 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"> <li>• Low forward voltage drop</li> <li>• Guard ring construction for transient protection</li> <li>• High conductance</li> </ul> <p><u>MECHANICAL DATA</u></p> <ul style="list-style-type: none"> <li>• Case : Molded plastic, SOD-323</li> <li>• Mounting position : Any</li> <li>• Polarity : Color band denotes cathode</li> </ul> <p><u>DEVICE MARKING CODE</u></p> <ul style="list-style-type: none"> <li>• SD103AWS : S4</li> <li>• SD103BWS : S5</li> <li>• SD103CWS : S6</li> </ul>	<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	$R_{\theta JA}$	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 30 20		V	$I_R=100\mu A$ $I_R=100\mu A$ $I_R=100\mu A$
Forward voltage		$V_F$		0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	SD103AWS SD103BWS SD103CWS	$I_{RM}$		5.0	$\mu A$	$V_R=30V$ $V_R=20V$ $V_R=10V$
Junction Capacitance		$C_J$	28		pF	$V_R=0, f=1MHz$
Reverse Recovery Time		$t_{rr}$	10		ns	$I_R=I_F=200mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

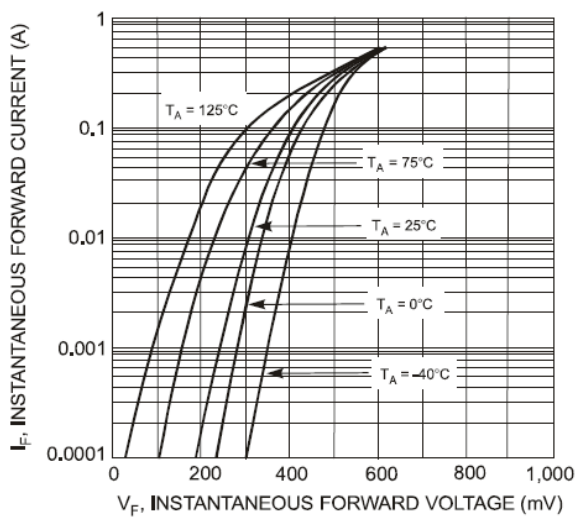


Fig. 1 Typical Forward Characteristics

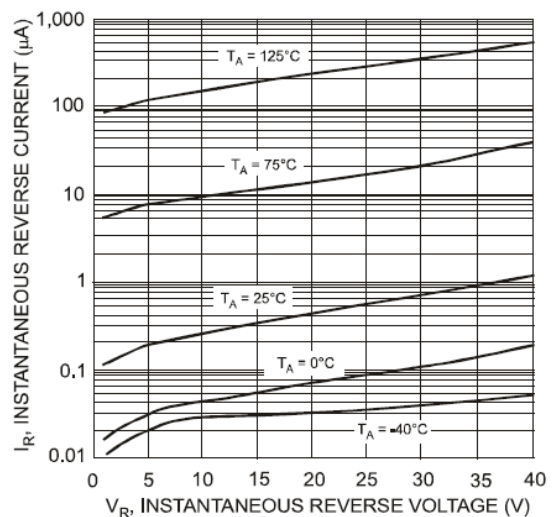


Fig. 2 Typical Reverse Characteristics

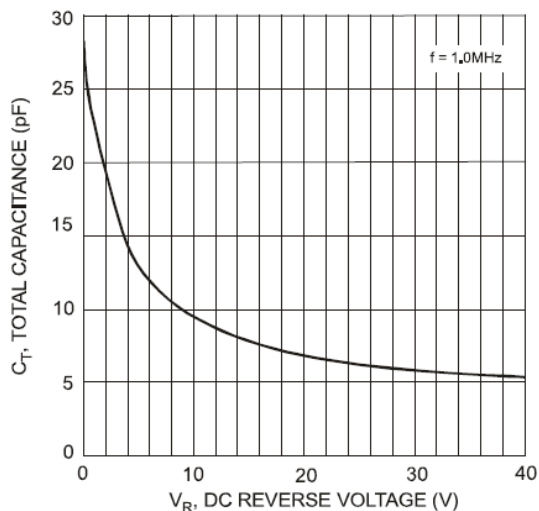


Fig. 3 Total Capacitance vs. Reverse Voltage

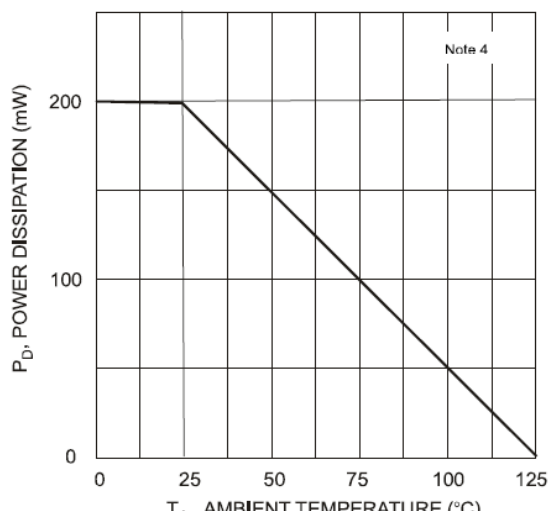


Fig. 4 Power Derating Curve