

# SD101AW - SD101CW

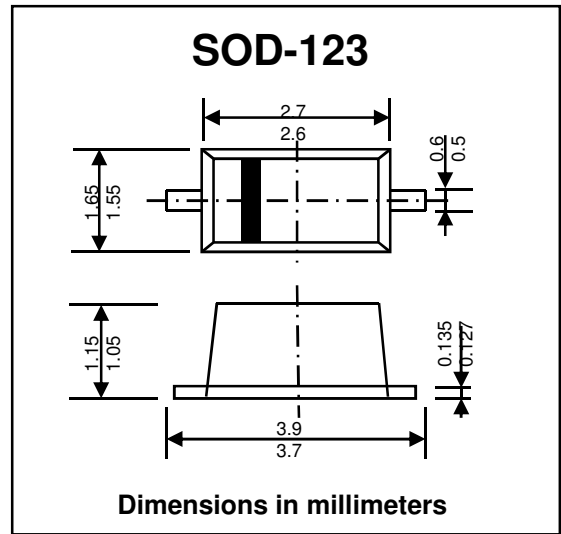
# SCHOTTKY BARRIER DIODES

### FEATURES :

- \* Low Forward Voltage
- \* Low Reverse Capacitance
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : SOD-123 plastic Case
- \* Weight : approx. 0.01 g
- \* Marking Code : " SM "



### Absolute Maximum Ratings (Ta = 25 °C)

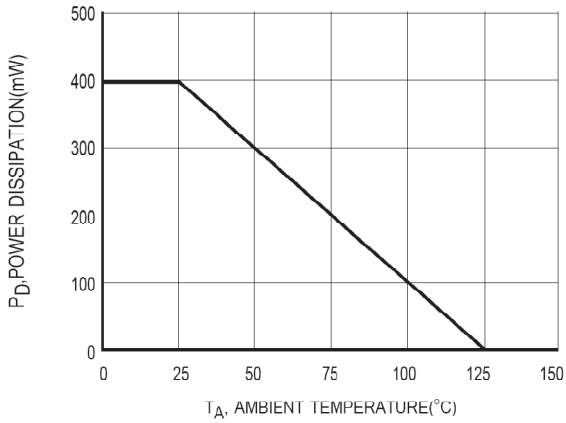
Parameter	Symbol	Value	Unit	
Repetitive Peak Reverse Voltage	SD101AW	60	V	
	SD101BW	50		
	SD101CW	40		
Reverse Voltage	SD101AW	60	V	
	SD101BW	50		
	SD101CW	40		
Forward Continuous Current	$I_{FM}$	15	mA	
Power Dissipation	$P_D$	400	mW	
Maximum Non-Repetitive Peak Forward Surge Current	at t = 1s at t = 10 μs	$I_{FSM}$	50	mA
			2	A
Operating Junction and Storage temperature range	$T_J, T_{STG}$	-55 to + 150	°C	

### Electrical Characteristics (Ta = 25 °C)

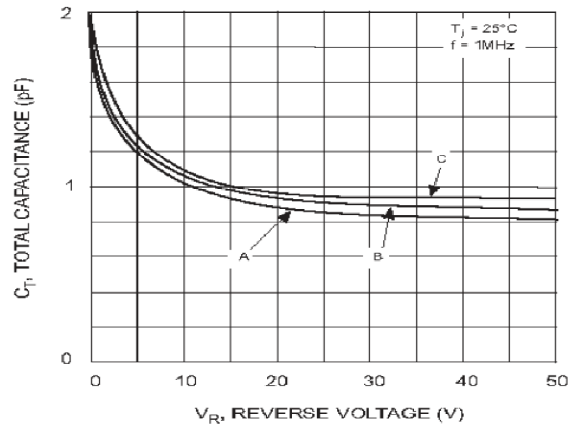
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	SD101AW	$I_R = 10 \mu A$	60	-	-	V
	SD101BW		50	-	-	
	SD101CW		40	-	-	
Reverse Current	$I_R$	$V_R = 50 V$	-	-	200	nA
		$V_R = 40 V$	-	-	200	
		$V_R = 30 V$	-	-	200	
Forward Voltage Drop	$V_F$	$I_F = 1mA$	-	-	0.41	V
			-	-	0.40	
		$I_F = 15mA$	-	-	1.00	
			-	-	0.95	
Total Capacitance	$C_T$	$V_R = 0 V, f = 1 MHz$	-	-	2.0	pF
			-	-	2.1	
			-	-	2.2	
Reverse Recovery Time	$T_{rr}$	$I_F = I_R = 5mA, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$	-	-	1	ns

**RATING AND CHARACTERISTIC CURVES (SD101AW - SD101CW)**

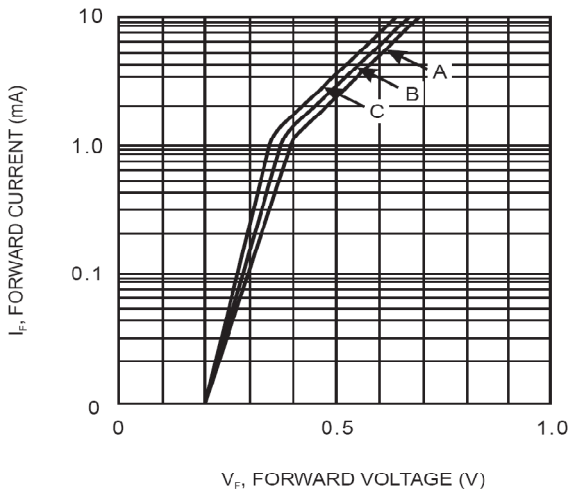
**Fig.1 - Power Derating Curve**



**Fig.2 - Typical Total Capacitance vs Reverse Voltage**



**Fig.3 - Typical Forward Characteristics**



**Fig.4 - Typical Reverse characteristics**

