

SD101AW - SD101CW

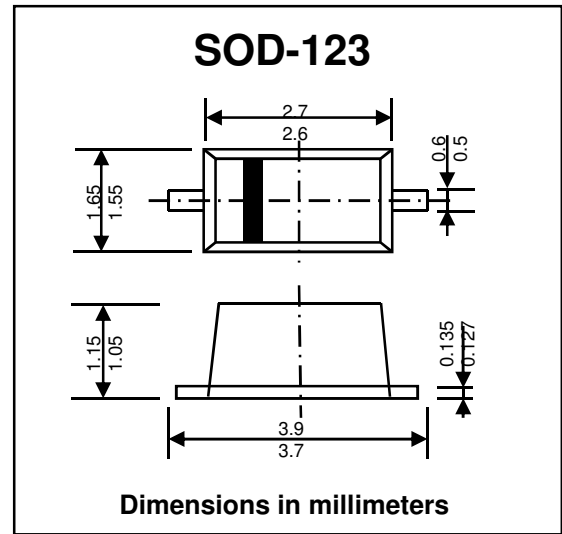
SCHOTTKY BARRIER DIODES

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	
		$I_F = 15mA$	-	-	0.39	
			-	-	1.00	
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

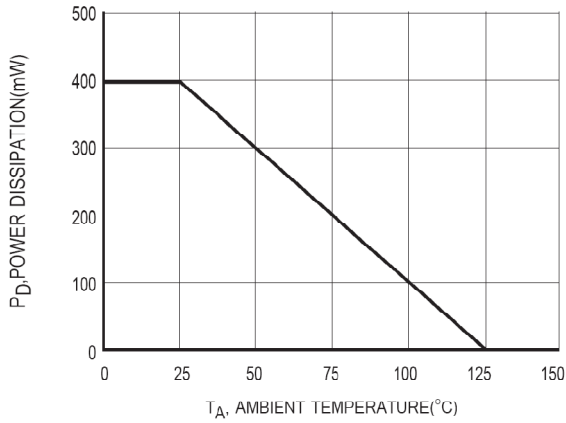


Fig.2 - Typical Total Capacitance vs Reverse Voltage

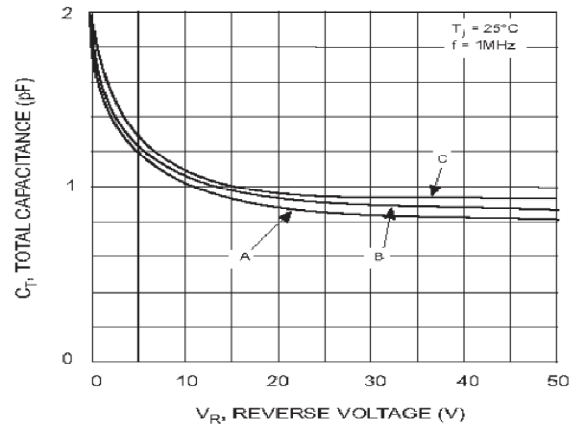


Fig.3 - Typical Forward Characteristics

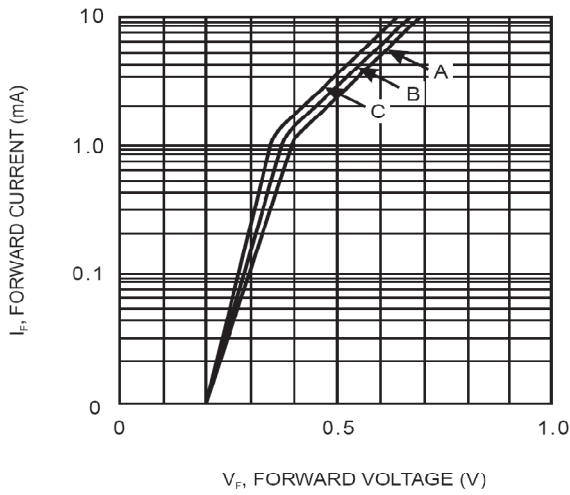


Fig.4 - Typical Reverse characteristics

