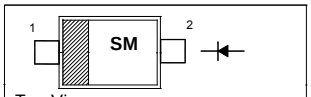
Surface Mount Schottky Barrier Diodes

Features

- Low forward voltage
- Low reverse capacitance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: **SM**
Simplified outline SOD-123 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit
Peak Repetitive Reverse Voltage	SD101AW SD101BW SD101CW	V_{RRM}	60 50 40	V
Reverse Voltage	SD101AW SD101BW SD101CW	V_R	60 50 40	V
Forward Continuous Current		I_{FM}	15	mA
Power Dissipation		P_d	400	mW
Non-Repetitive Peak Forward Surge Current	at t = 1 s at t = 10 μs	I_{FSM}	50 2	mA A
Operating and Storage Temperature Range		T_j, T_{stg}	- 65 to + 125	°C

Characteristics at T_a = 25 °C

Parameter		Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 10 μA	SD101AW SD101BW SD101CW	$V_{(BR)R}$	60 50 40	- - -	V
Forward Voltage at I_F = 1 mA at I_F = 15 mA	SD101AW SD101BW SD101CW SD101AW SD101BW SD101CW	V_F	- - - - - -	0.41 0.4 0.39 1 0.95 0.9	V
Reverse Current at V_R = 50 V at V_R = 40 V at V_R = 30 V	SD101AW SD101BW SD101CW	I_R	- - -	200 200 200	nA
Total Capacitance at V_R = 0 V, f = 1 MHz	SD101AW SD101BW SD101CW	C_T	- - -	2 2.1 2.2	pF
Reverse Recovery Time at I_F = I_R = 5 mA , I_{rr} = 0.1X I_R, R_L = 100 Ω		t_{rr}	-	1	ns

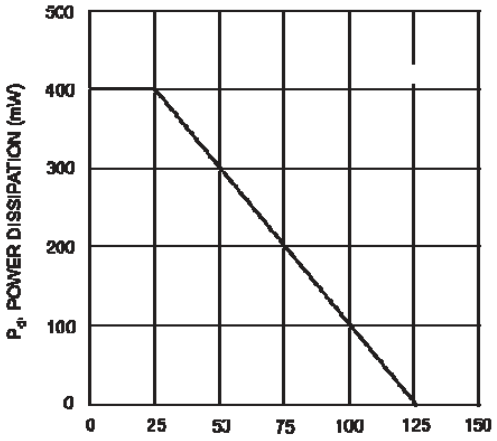


Fig.1 Power Derating Curve

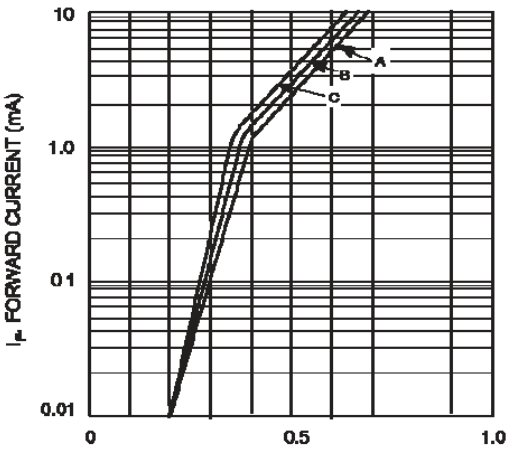


Fig 2 Typical Forward Characteristic

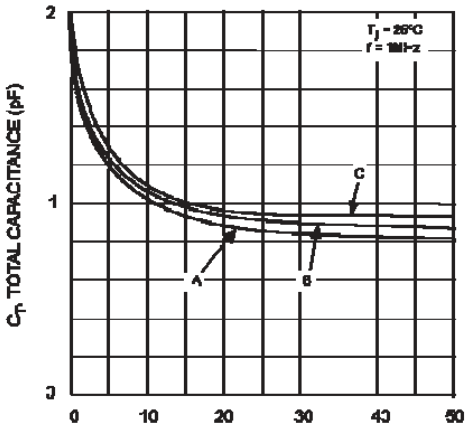


Fig. 3 Typical Total Capacitance vs Reverse Voltage

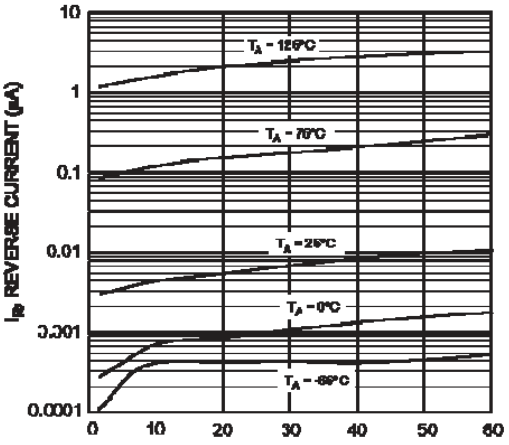


Fig 4 Typical Reverse Characteristics