Surface Mount Schottky Barrier Diodes

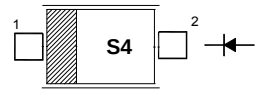
Features

• Low Forward Voltage

Marking Code : S4

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: **S4**
Simplified outline SOD-123 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Reverse Voltage	V_R	40	V
Average Forward Rectified Current	$I_{F(AV)}$	350	mA
Non-Repetitive Peak Forward Surge Current at t = 1 s	I_{FSM}	2	A
Power Dissipation	P_{tot}	400	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 125	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at I_R = 10 µA	$V_{(BR)R}$	40	-	-	V
Reverse Leakage Current at V_R = 30 V	I_R	-	-	5	µA
Forward Voltage at I_F = 20 mA at I_F = 200 mA	V_F	- -	- -	0.37 0.6	V
Total Capacitance at V_R = 0 V, f = 1 MHz	C_T	-	50	-	pF
Reverse Recovery Time at I_F = I_R = 200 mA, I_{rr} = 0.1 I_R, R_L = 100 Ω	t_{rr}	-	10	-	ns

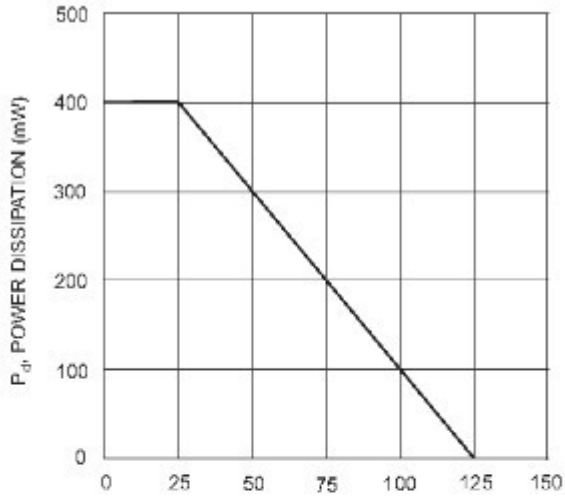


Fig.1 Power Derating Curve

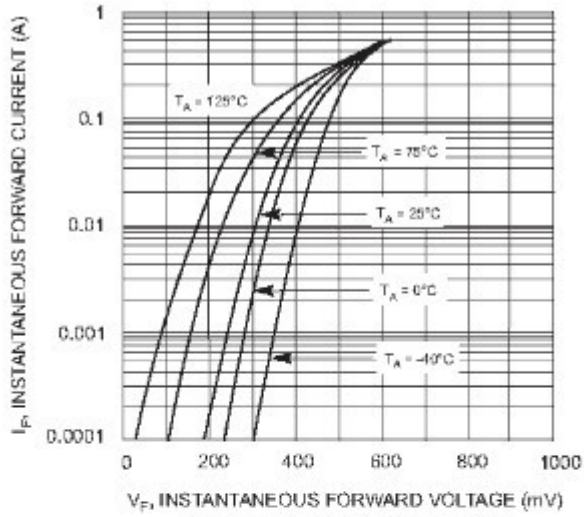


Fig. 2 Typical Forward Characteristics

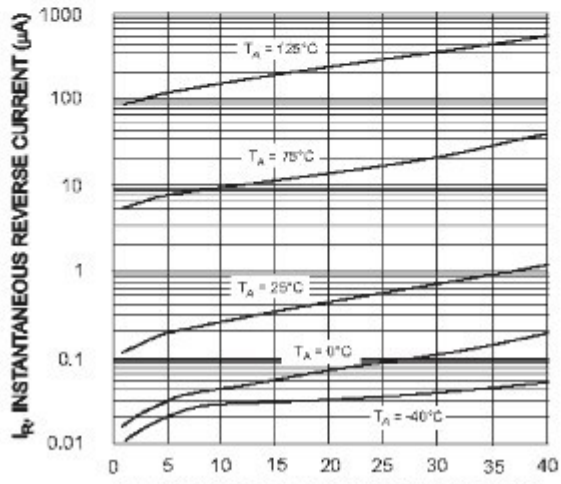


Fig. 3 Typical Reverse Characteristics

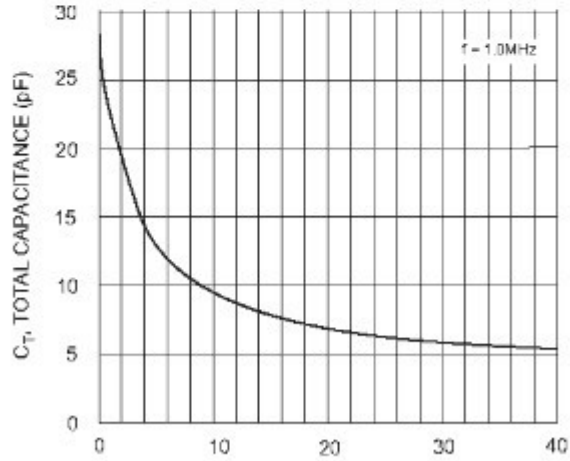
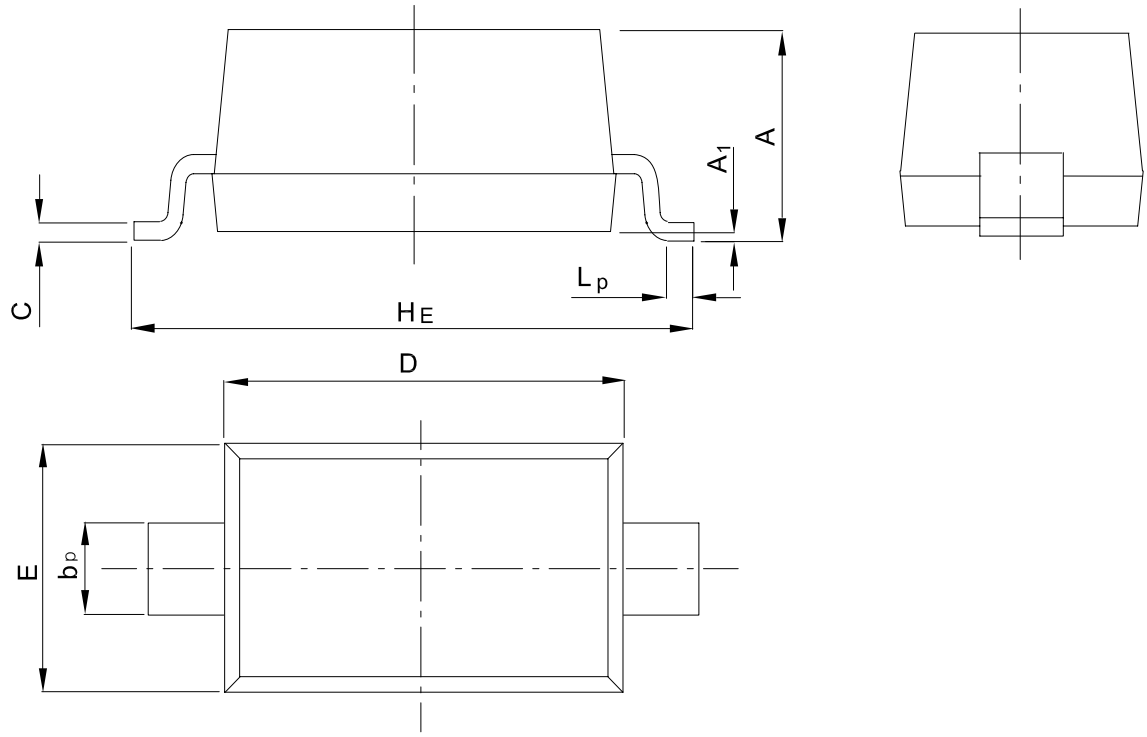


Fig. 4 Typ. Total Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20