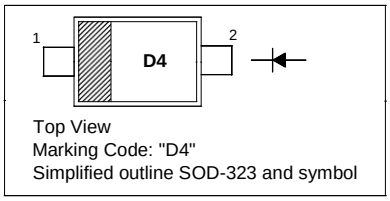
Silicon Epitaxial Planar Switching Diode

Features

- Fast switching speed
- Ultra-small surface mount package
- For general purpose switching applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "D4"
Simplified outline SOD-323 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Repetitive Reverse Voltage	V_{RRM}	85	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current Pulse Width = 1 s Pulse Width = 1 us	I_{FSM}	 0.5 4	A
Power Dissipation	P_{tot}	250	mW
Thermal Resistance Junction to Ambient	$R_{èJA}$	833	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Electrical Characteristics (T_a = 25°C)

Parameter	Symbol	Min.	Max.	Unit
Breakdown Voltage at I_R = 5 µA at I_R = 100 µA	V_R	 75 100	 - -	 V V
Forward Voltage at I_F = 1mA I_F = 10 mA I_F = 50 mA I_F = 150 mA	V_F	-	0.9 1 1.1 1.25	V
Reverse Current at V_R = 20 V at V_R = 75 V	I_R	 - -	 25 1	 nA µA
Diode Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	-	4	pF
Reverse Recovery Time at I_{rr} = 0.1 X I_R, I_F = I_R = 10 mA, R_L = 100 Ω	t_{rr}	-	3	ns

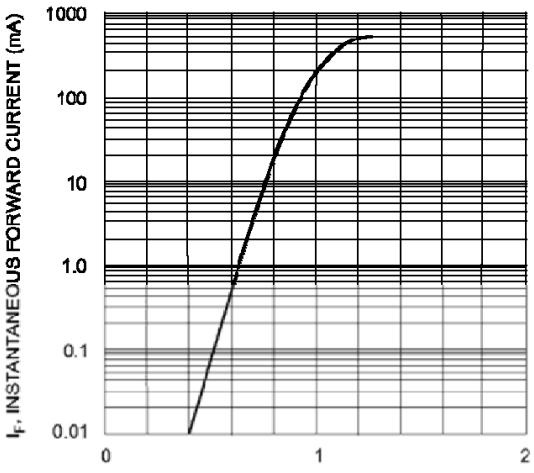


Fig. 1 Forward Characteristics

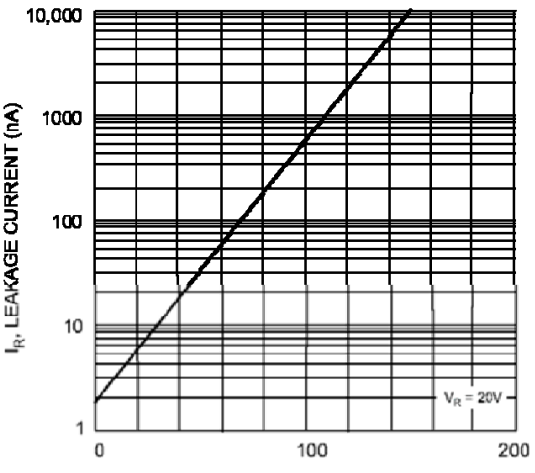
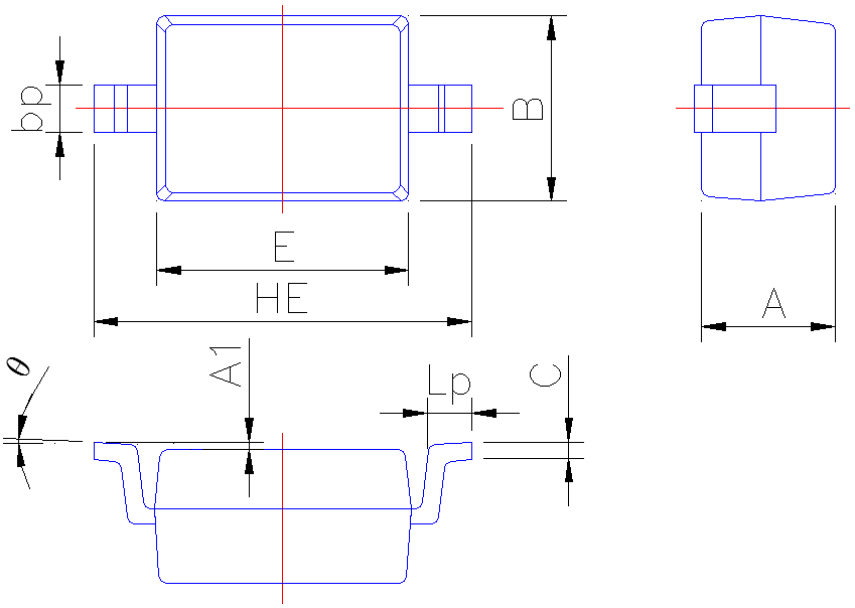


Fig. 2 Leakage Current vs Junction Temperature

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.15
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.40
C	0.09	0.150
E	1.60	1.80
HE	2.30	2.70
Lp	0.20	0.40
θ	0°	5°