

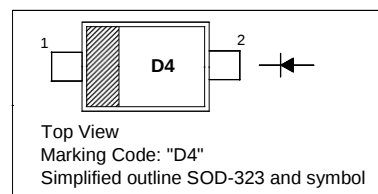
Silicon Epitaxial Planar Switching Diode

Features

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

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 μs	I_{FSM}	0.5 4	A
Power Dissipation	P_{tot}	250	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	$^\circ\text{C/W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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

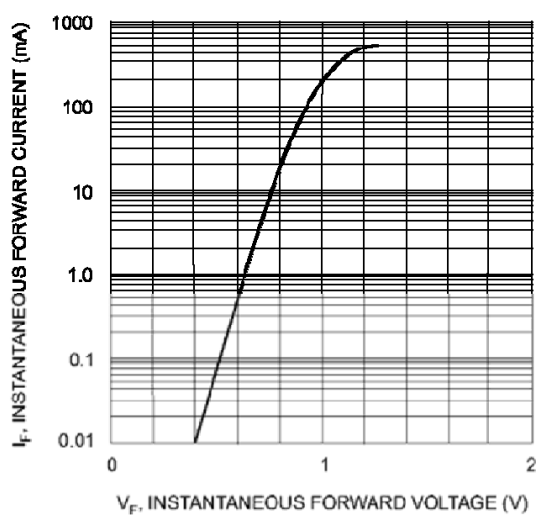


Fig. 1 Forward Characteristics

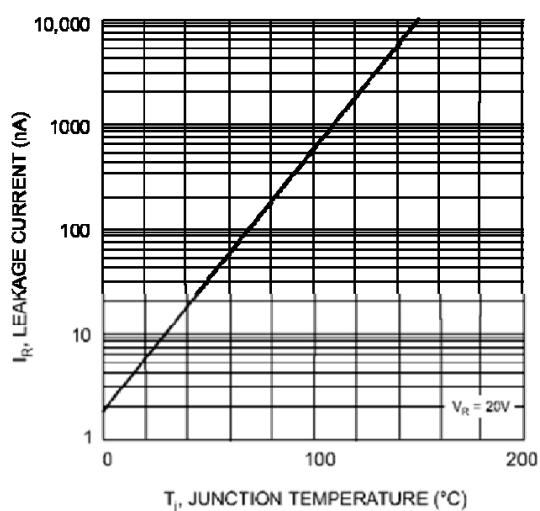
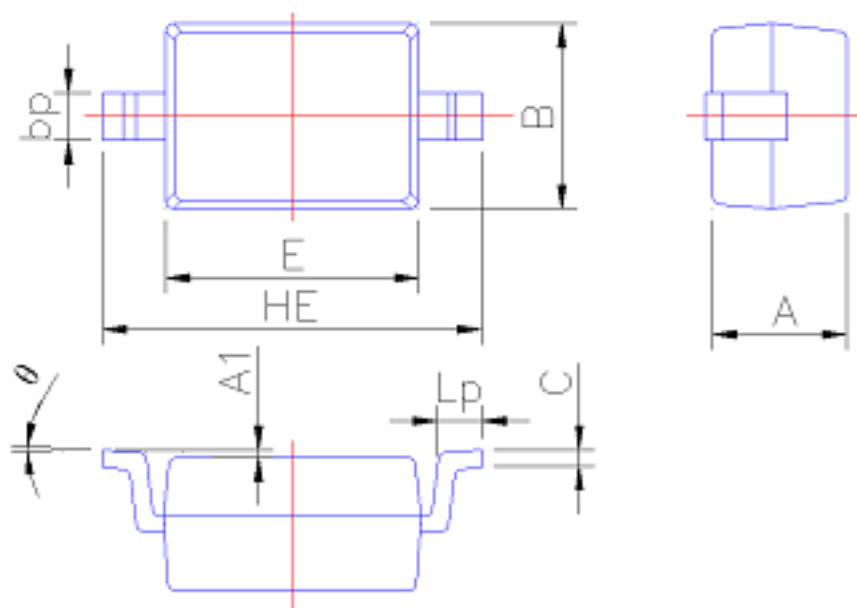


Fig. 2 Leakage Current vs Junction Temperature

**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°