

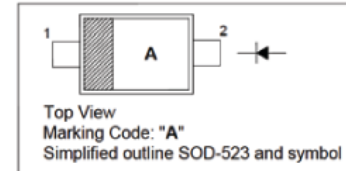
## Silicon Epitaxial Planar Switching Diode

### 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	$V_{RRM}$	100	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current Pulse Width = 1 s Pulse Width = 1 $\mu\text{s}$	$I_{FSM}$	0.5 1	A
Power Dissipation	$P_{tot}$	150	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	$^\circ\text{C}$

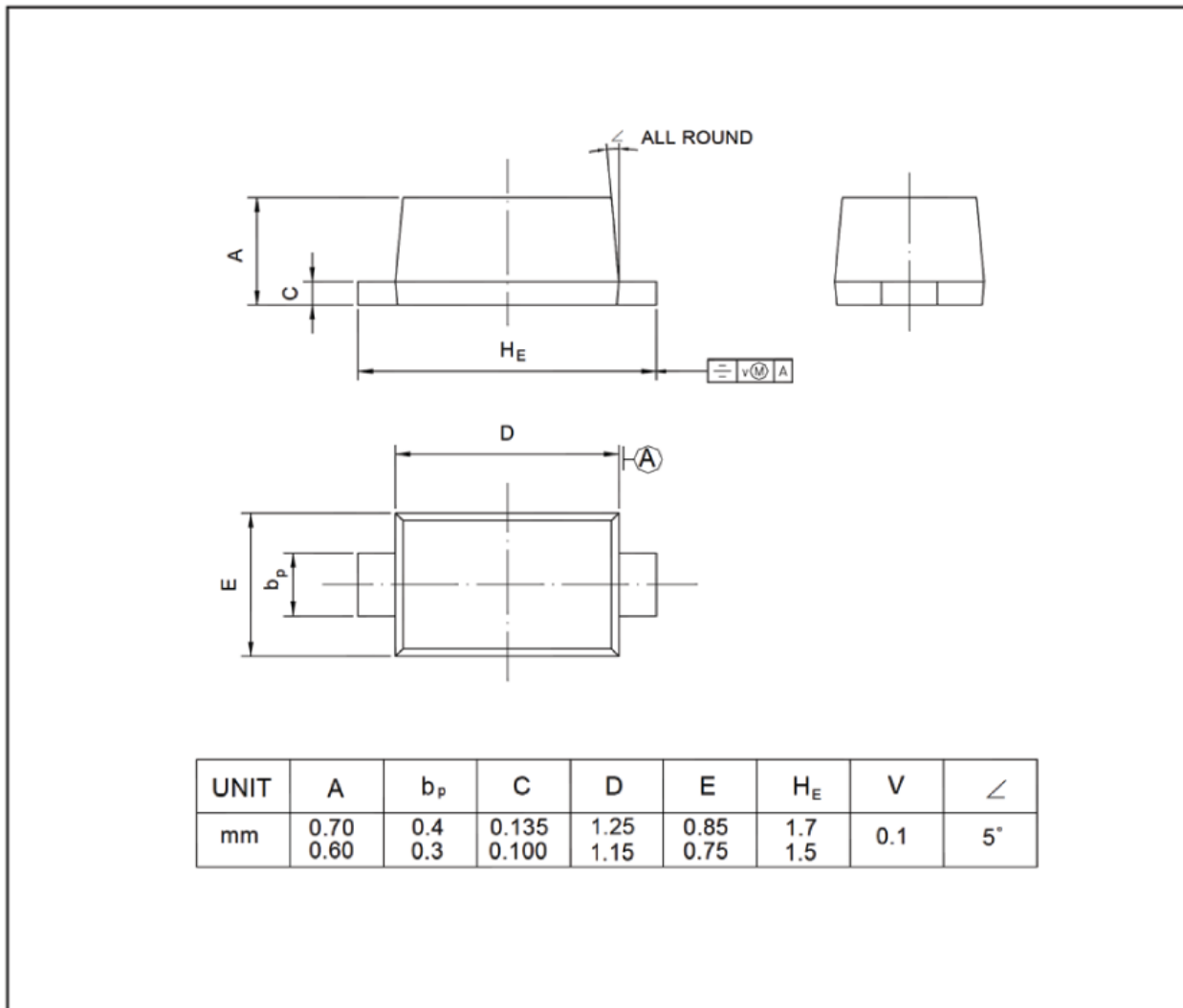
### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

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 $I_F = 10 \text{ mA}$	$V_F$	-	1	V
Reverse Current at $V_R = 20 \text{ V}$ at $V_R = 75 \text{ V}$	$I_R$	- -	25 5	nA $\mu\text{A}$
Diode Capacitance at $V_R = 0 \text{ V}$ , $f = 1 \text{ MHz}$	$C_{tot}$	-	4	pF
Reverse Recovery Time at $I_{rr} = 0.1 \times I_R$ , $I_F = I_R = 10 \text{ mA}$ , $R_L = 100 \Omega$	$t_{rr}$	-	4	ns

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



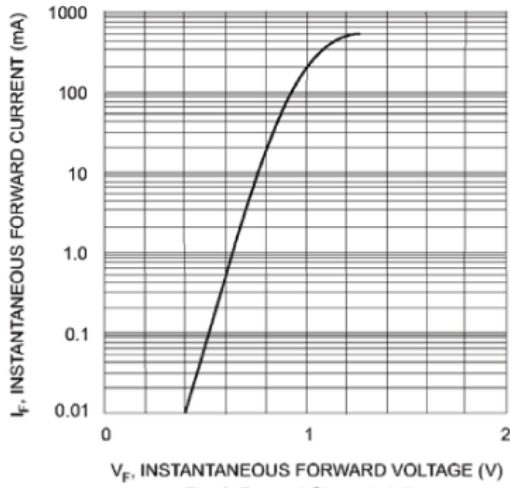


Fig. 1 Forward Characteristics

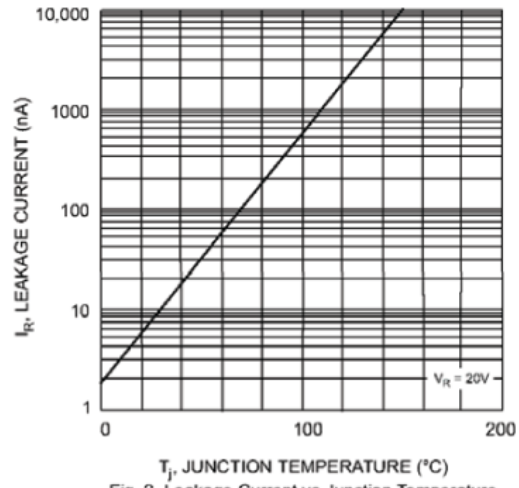


Fig. 2 Leakage Current vs Junction Temperature