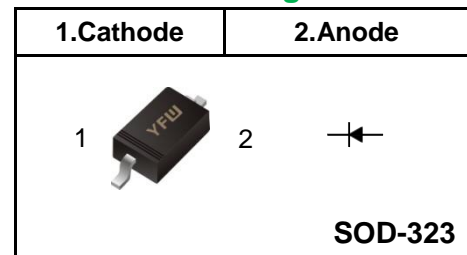


**Silicon Epitaxial Planar Switching Diode**
**FEATURES**

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

**Pinning**

**Marking: D4**
**Absolute Maximum Ratings (Ta = 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	$R_{\theta JA}$	833	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	- 55 to + 150	°C

**Electrical Characteristics (Ta = 25°C)**

Parameter	Symbol	Min.	Max.	Unit
Breakdown Voltage at $I_R = 5 \mu A$ at $I_R = 100 \mu A$	$V_R$	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 $\mu A$
Diode Capacitance at $V_R = 0 V, f = 1 MHz$	$C_{tot}$	-	4	pF
Reverse Recovery Time at $I_{rr} = 0.1 \times I_R, I_F = I_R = 10 mA, R_L = 100 \Omega$	$t_{rr}$	-	3	ns

Typical Characteristics

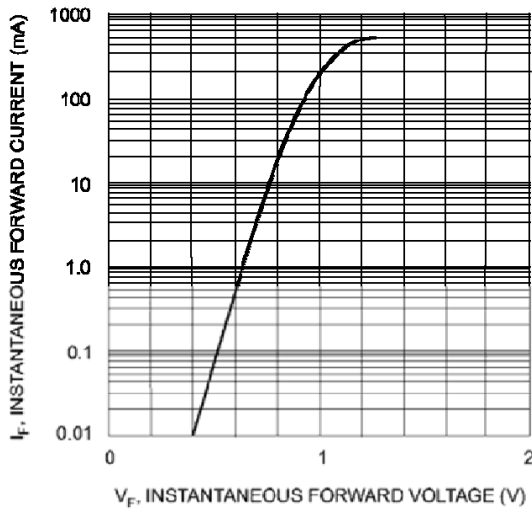


Fig. 1 Forward Characteristics

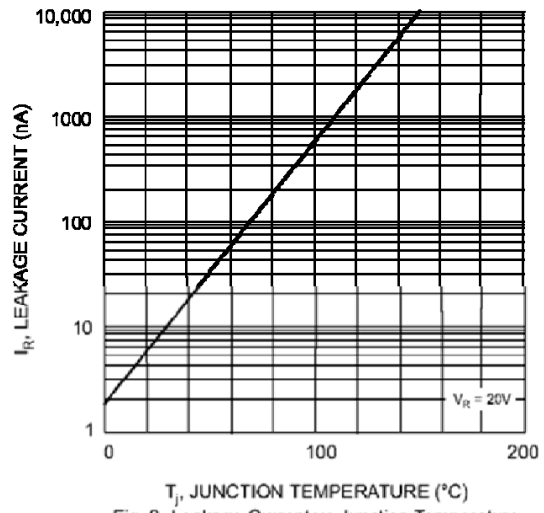
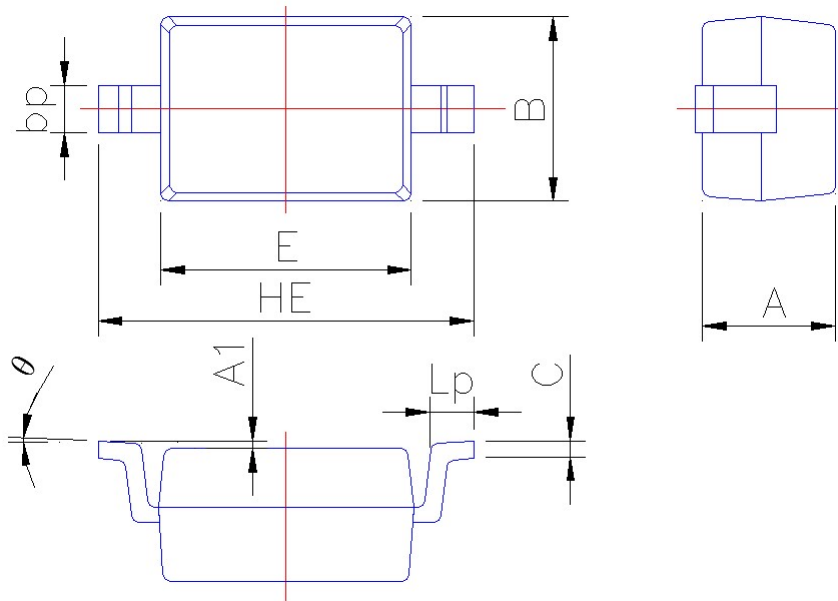


Fig. 2 Leakage Current vs Junction Temperature

**Package Outline SOD-323**

Plastic surface mounted package; 2 leads



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°

**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323	Tape/Reel, 7" reel	3000	EIA-481-1