

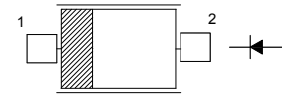
SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low Forward Voltage
- Fast Switching
- Ultra-Small Surface Mount Package

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View

Simplified outline SOD-323 and symbol

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Reverse Voltage	V_R	30	V
Average Rectified Output Current	I_O	100	mA
Forward Continuous Current	I_{FM}	200	mA
Repetitive Peak Forward Current at $t < 1$ s	I_{FRM}	500	mA
Non-repetitive Peak Forward Surge Current at $t < 10$ ms	I_{FSM}	2	A
Power Dissipation	P_{tot}	160	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction Temperature	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{Stg}	- 55 to + 125	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	30	-	V
Reverse Current at $V_R = 25$ V	I_R	-	500	nA
Forward Voltage at $I_F = 200$ mA at $I_F = 10$ mA at $I_F = 50$ mA at $I_F = 2$ mA at $I_F = 15$ mA	V_F	- - - 0.26 -	1 0.4 0.65 0.33 0.45	V
Total Capacitance at $V_R = 1$ V, $f = 1$ MHz	C_T	-	10	pF
Reverse Recovery Time at $I_F = I_R = 10$ mA, $I_{RR} = 0.1 \times I_R$, $R_L = 100 \Omega$	t_{rr}	-	5	ns

Typical Characteristics

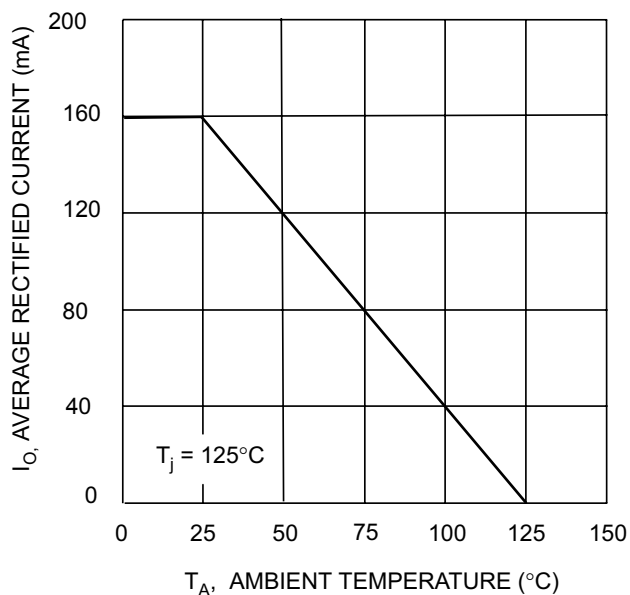


Fig. 1 Forward Current Derating Curve

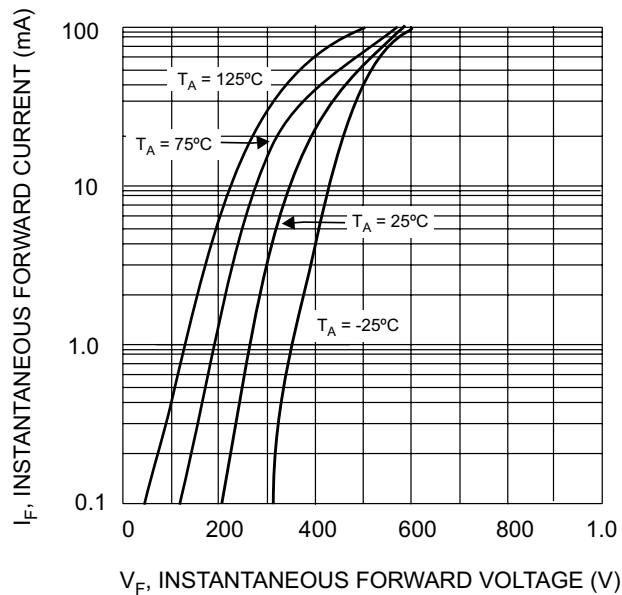


Fig. 2 Typical Forward Characteristics

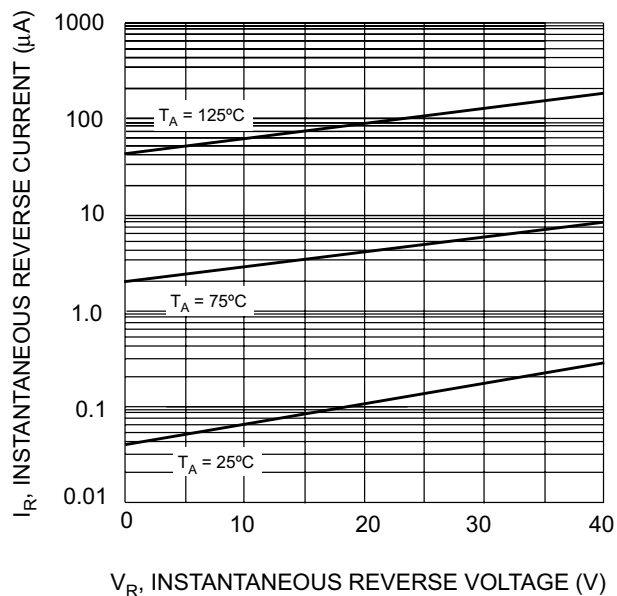


Fig. 3 Typical Reverse Characteristics

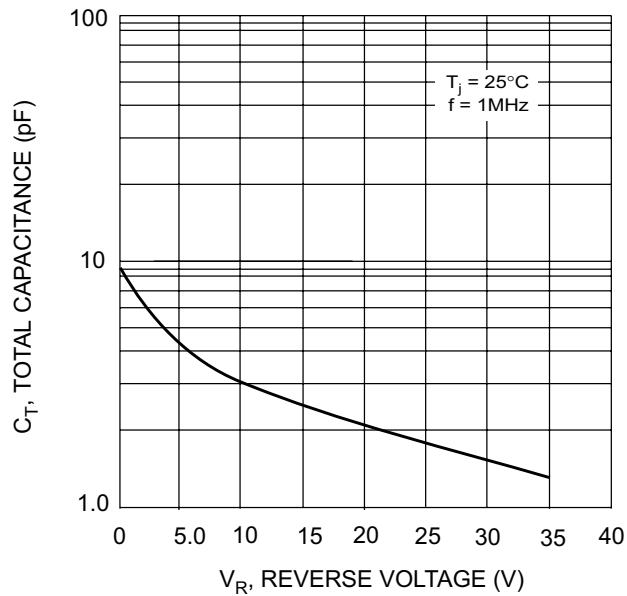
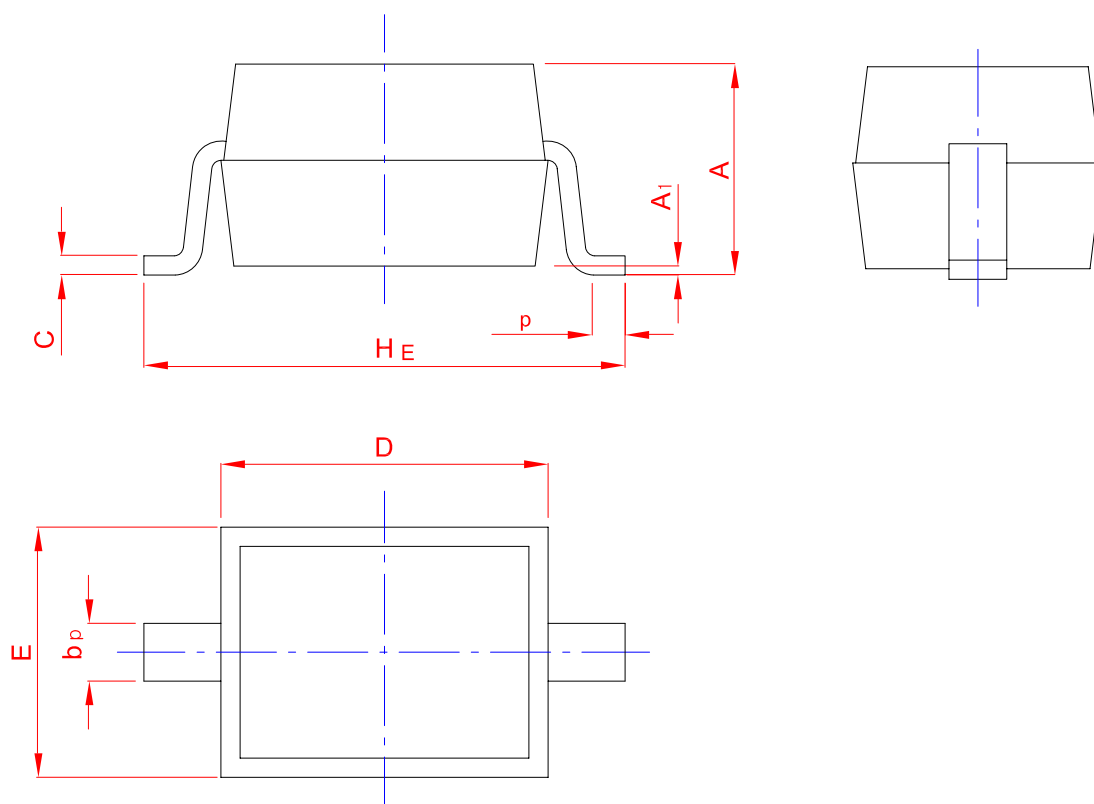
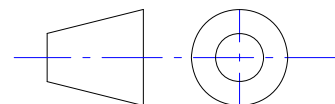


Fig. 4 Total Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20