

SDB309WT

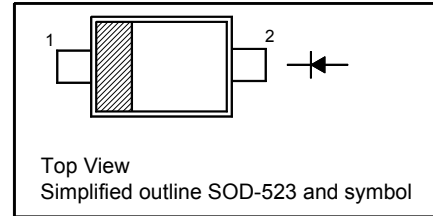
Schottky Barrier Diode

Features

- Low power rectified
- Silicon epitaxial type
- High reliability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



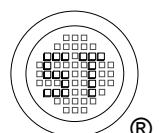
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	30	V
Forward Current	I_F	100	mA
Repetitive Peak Forward Current	I_{FRM}	200	mA
Non-Repetitive Peak Forward Current ¹⁾	I_{FSM}	1	A
Junction Temperature	T_j	125	$^\circ\text{C}$
Operating Temperature Range	T_{opr}	- 40 to + 85	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^\circ\text{C}$

¹⁾ 50Hz sine wave 1 cycle (Non- repetitive peak current)

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	30	-	-	V
Forward Voltage at $I_F = 10 \text{ mA}$ at $I_F = 100 \text{ mA}$	V_F	- -	- -	0.44 0.58	V
Reverse Current at $V_R = 10 \text{ V}$ at $V_R = 30 \text{ V}$	I_R	- -	- -	0.3 2	μA
Total Capacitance at $V_R = 10 \text{ V}$, $f = 1 \text{ MHz}$	C_T	-	3	-	pF
Reverse Recovery Time at $I_F = I_R = 100 \text{ mA}$, $I_{RR} = 10 \text{ mA}$, $R_L = 100 \Omega$	t_{rr}	-	3	-	ns



Electrical Characteristics Curves

Fig 1. Reverse Characteristic Curve

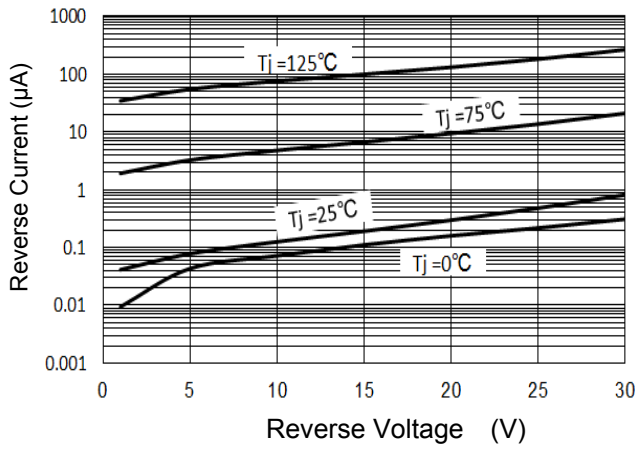


Fig 2. Forward Characteristic Curve

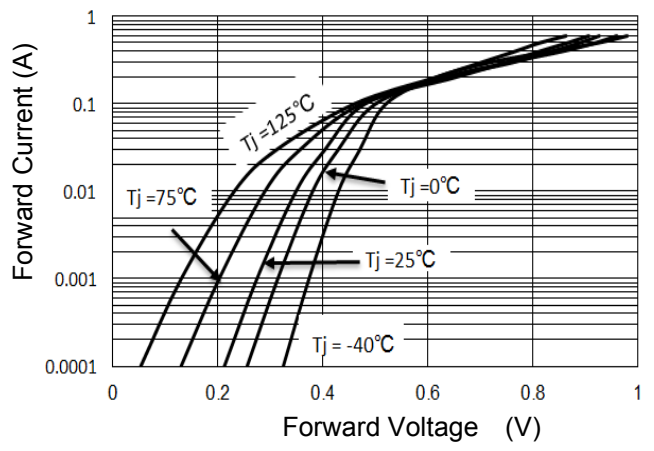


Fig 3. Junction Capacitance

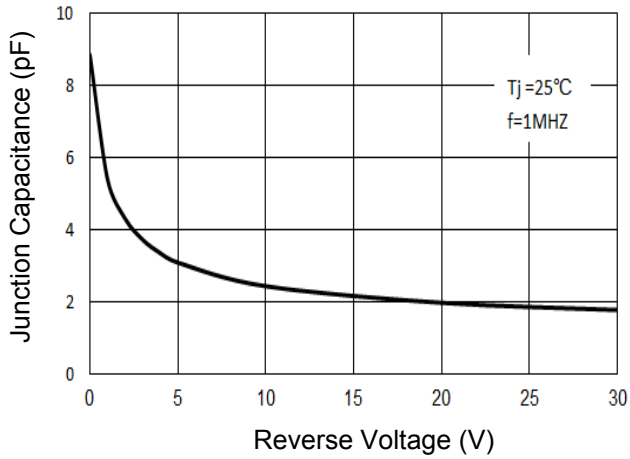
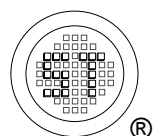
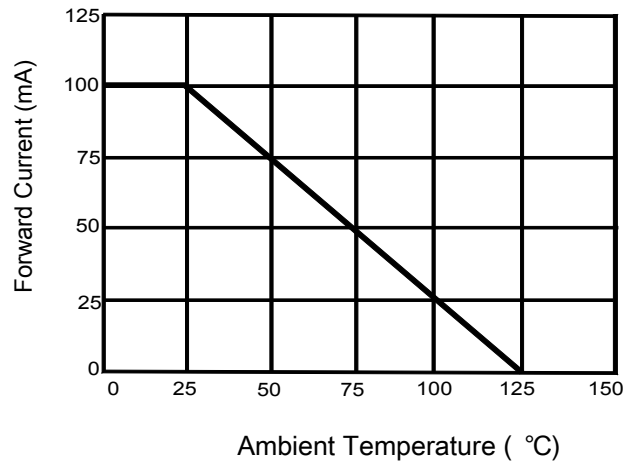


Fig 4. Forward Current Derating Curve

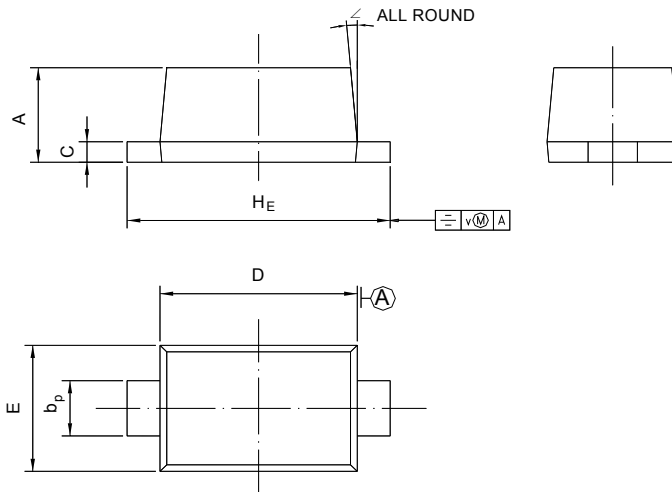


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PACKAGE OUTLINE

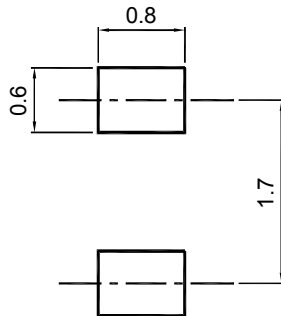
Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.70 0.60	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-523	8	4 ± 0.1	0.157 ± 0.004	178	7	4,000

Marking information

" G " = Part No.

" III " = Cathode line

Font type: Arial

