

1SS06AWT

Schottky Barrier Diode

Features

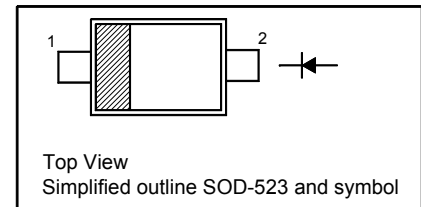
- Very low forward voltage
- Very low reverse current
- Ultra small SMD package

Applications

- Ultra high-speed switching
- Voltage clamping
- Protection circuits
- Low power consumption applications

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

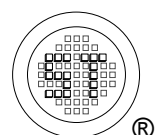


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	40	V
Average Forward Rectified Current	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current $t_p \leq 1$ s	I_{FRM}	300	mA
Non-repetitive Peak Forward Current ($t = 8.3$ ms half sinewave)	I_{FSM}	1	A
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	40	-	V
Forward Voltage at $I_F = 0.1$ mA at $I_F = 1$ mA at $I_F = 10$ mA at $I_F = 100$ mA at $I_F = 200$ mA	V_F	- - - - -	220 290 360 500 600	mV
Reverse Current at $V_R = 25$ V	I_R	-	0.5	μA
Diode Capacitance at $V_R = 1$ V, $f = 1$ MHz	C_D	-	20	pF



Electrical Characteristics Curves

Fig 1. Average Rectified Current Derating Curve

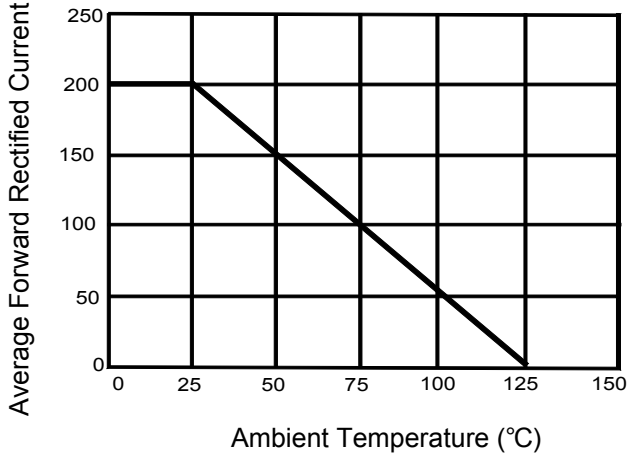


Fig 2. Forward Characteristics Curve

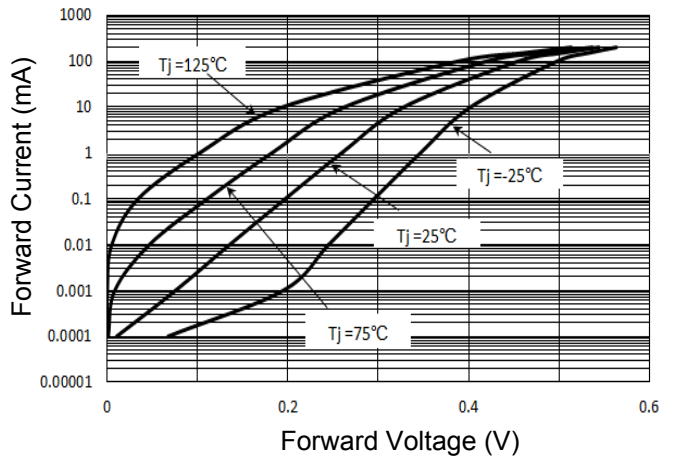


Fig 3. Reverse Characteristics Curve

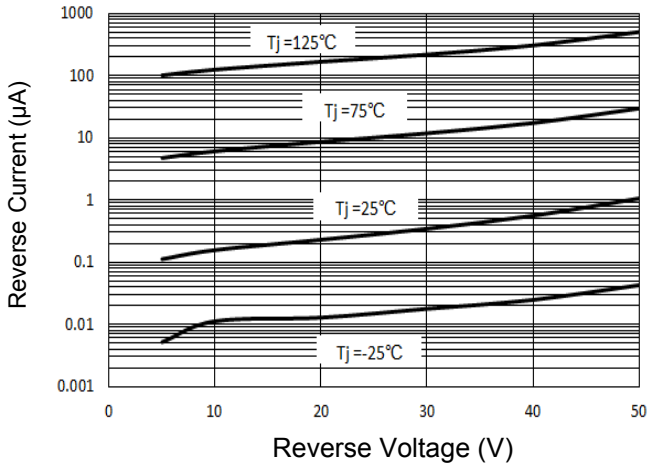
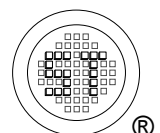
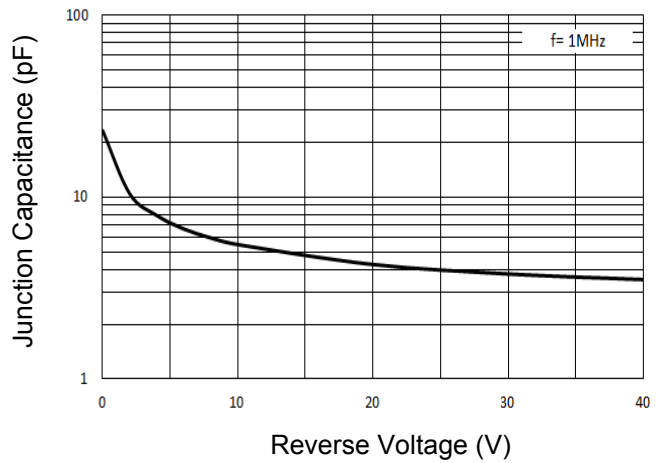


Fig 4. Junction Capacitance

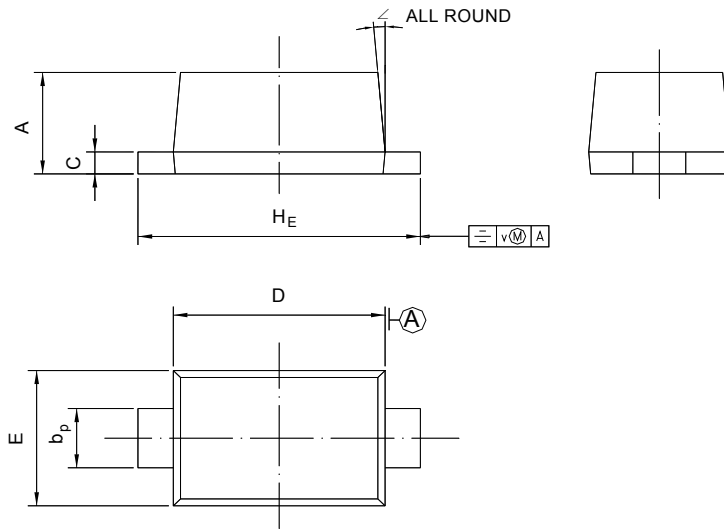


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PACKAGE OUTLINE

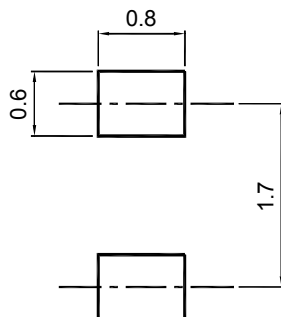
Plastic surface mounted package; 2 leads

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

" J " = Part No.
 " III " = Cathode line
 Font type: Arial

