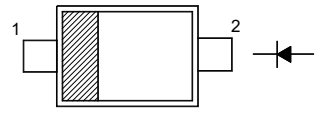
A1SS400

Silicon Epitaxial Planar Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-523 and symbol

Features

- AEC-Q101 Qualified
- Extremely small surface mounting type
- High reliability
- Halogen and Antimony Free(HAF), RoHS compliant

Applications

- For high speed switching application

Absolute Maximum Ratings (T_a = 25℃)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	100	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	I_{FM}	225	mA
Non-repetitive Peak Forward Surge Current (at t = 1 s)	I_{FSM}	500	mA
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	- 55 to + 150	℃

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 μA	$V_{(BR)R}$	100	-	V
Forward Voltage at I_F = 100 mA	V_F	-	1.2	V
Reverse Current at V_R = 80 V	I_R	-	0.1	μA
Capacitance Between Terminals at V_R = 0.5 V, f = 1 MHz	C_T	-	3	pF
Reverse Recovery Time at I_F = 10 mA, I_{rr} = 0.1 × I_R, V_R = 6 V, R_L = 100 Ω	t_{rr}	-	4	ns

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Electrical Characteristics Curves

Fig 1. Reverse Current vs. Reverse Voltage

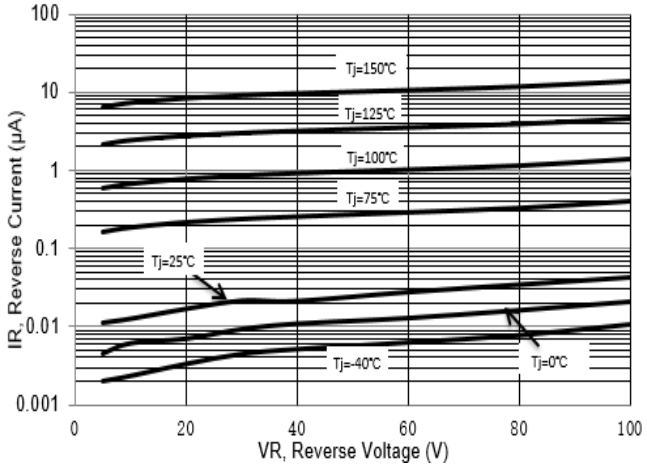


Fig 2. Forward Characteristics

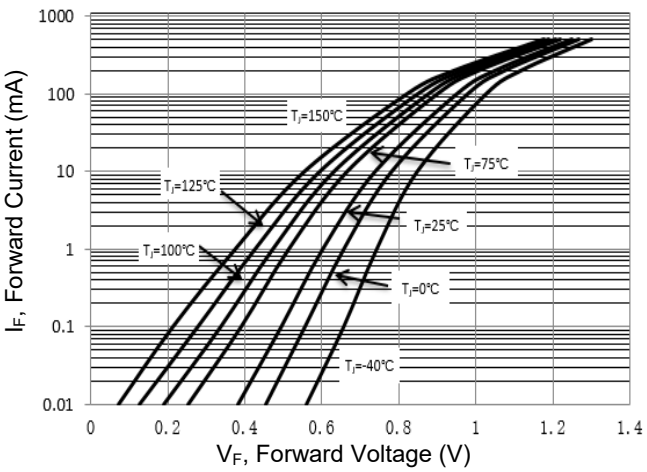
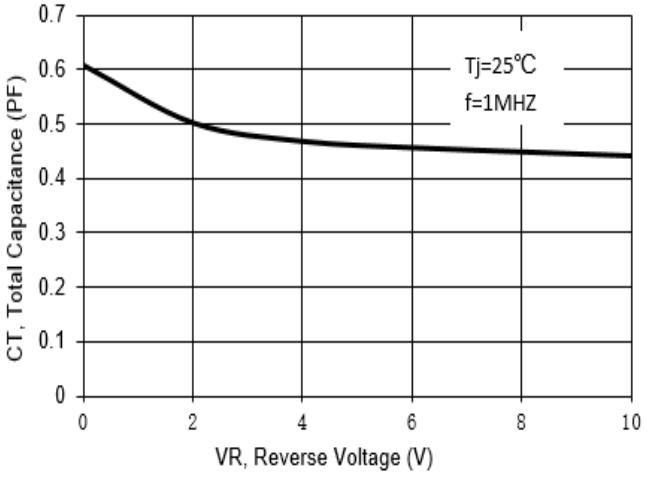
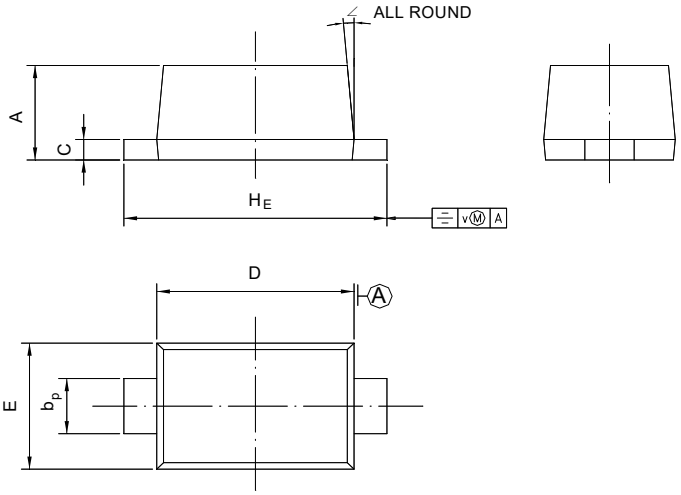


Fig 3. Total Capacitance vs. Reverse Voltage



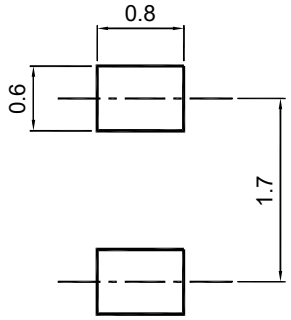
PACKAGE OUTLINE

Plastic surface mounted package **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

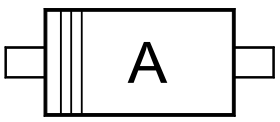


Packing information

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

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



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