

Switching Diodes

Features

- For surface mounted applications
- Fast reverse recovery time
- Ideal for automated placement
- Qualified to AEC-Q101 Standards for High Reliability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Simplified outline SOD-523 and symbol

Marking: A

Maximum Ratings @Ta=25°C

Parameter	Symbols	S-1SS400WT	Units
Reverse Voltage	V_R	100	V
Peak Repetitive Reverse Voltage	V_{RRM}		V
Working Peak Reverse Voltage	V_{RWM}		V
RMS Reverse Voltage	$V_{R(RMS)}$	56	V
Average Rectified Output Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current@t= 1us	I_{FSM}	2	A
Power Dissipation	P_D	150	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

Electrical Characteristics @Ta=25°C

Parameter	Symbols	Test conditions	Min	Typ	Max	Units
Reverse voltage	$V_{(BR)}$	$I_R = 1\mu A$	100			V
Reverse current	I_R	$V_R = 100V$			0.1	μA
Forward voltage	V_F	$I_F = 100\text{ mA}$			1.2	V
Total capacitance	C_{tot}	$V_R = 0V, f = 1MHz$			3	pF
Reverse recovery time	t_{rr}	$I_F = 10mA, V_R = 6V, I_{tr} = 0.1I_R, R_L = 100\Omega$			4	ns

Typical Characteristics

Fig.1 Power Derating Curve

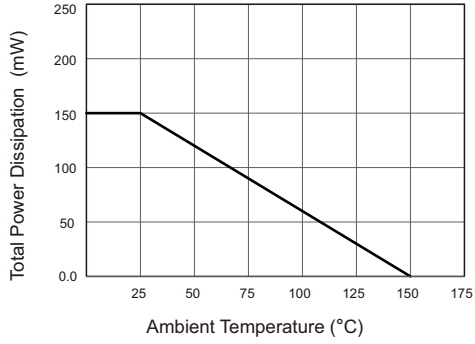


Fig.2 Typical Reverse Characteristics

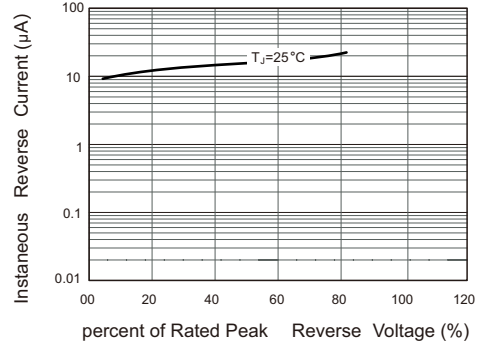


Fig.3 Typical Instaneous Forward Characteristics

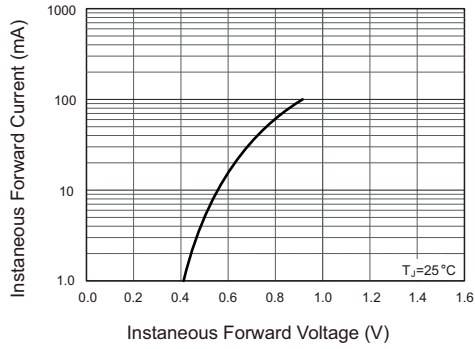
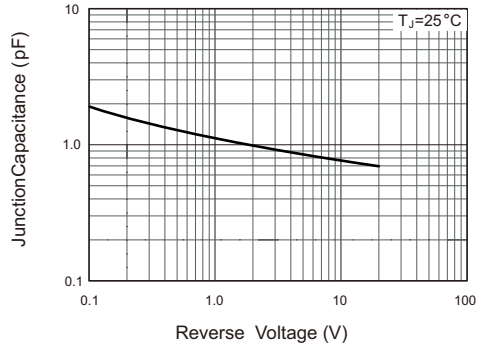


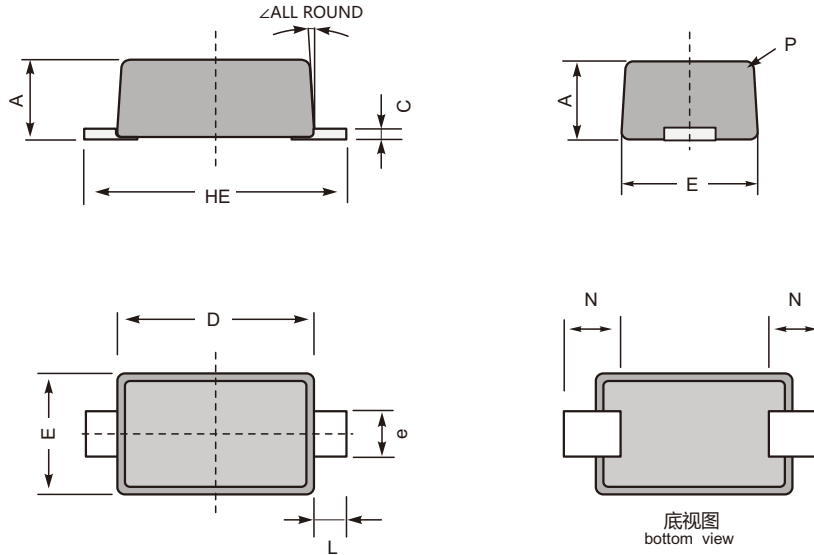
Fig.4 Typical Junction Capacitance



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT		A	e	C	D	E	HE	N	L	P	∠
mm	max	0.77	0.35	0.15	1.30	0.99	1.70	0.35 ref	0.2 ref	R0.1 ALL ROUND	10° ±1°
	min	0.51	0.25	0.08	1.10	0.75	1.50				
mil	max	30	14	6	51	39	67	14 ref	8.0 ref	R4.0 ALL ROUND	
	min	20	10	3	43	30	59				

The recommended mounting pad size

