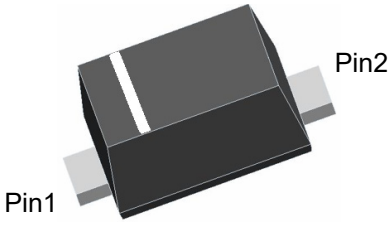
Prisemi®

PBAV21WT

Switching Diode

Feature

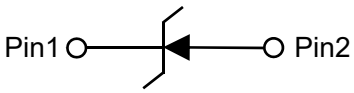
- SOD-523 Package
- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 3
- High temperature soldering guaranteed 260℃/10 seconds at terminals



SOD-523(Top View)

Applications

- Extreme fast switches
- Automotive



Circuit Diagram

Absolute maximum rating@25℃

Parameter	Symbol	Value	Units
Reverse Voltage	V_R	250	V
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
Power Dissipation	P_D	150	mW
Average Rectified Current	I_{FAV}	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	833	℃/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55~+150	℃

Electrical characteristics per line@25℃

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Voltage	V_{BR}	I_R=100μA	250	-	-	V
Forward Voltage	V_F	I_F=100mA	-	0.93	1.0	V
		I_F=200mA	-	1.05	1.25	
Reverse Leakage Current	I_R	V_R=200V	-	-	0.1	μA
Capacitance	C_T	V_R=V_F=0V, f=1MHz	-	-	5.0	pF
Reverse Recovery Time	t_{rr}	I_F= I_R=10mA, R_L=100Ω, I_{RR}=0.1 X I_R	-	-	50	ns

Typical Characteristics

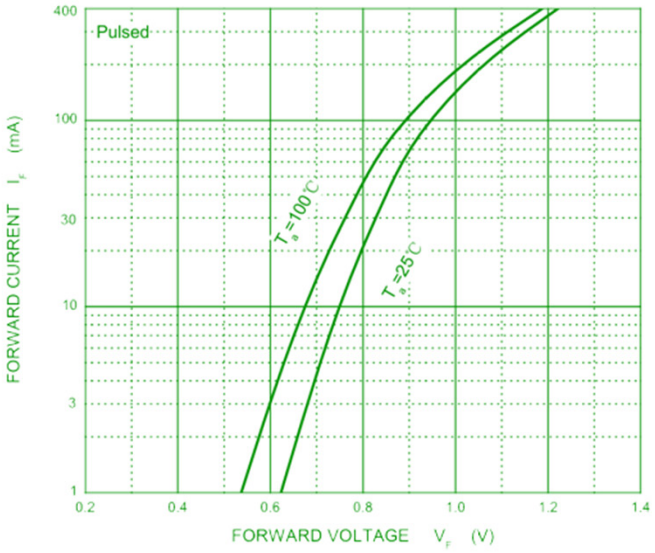


Fig 1. Forward Characteristics

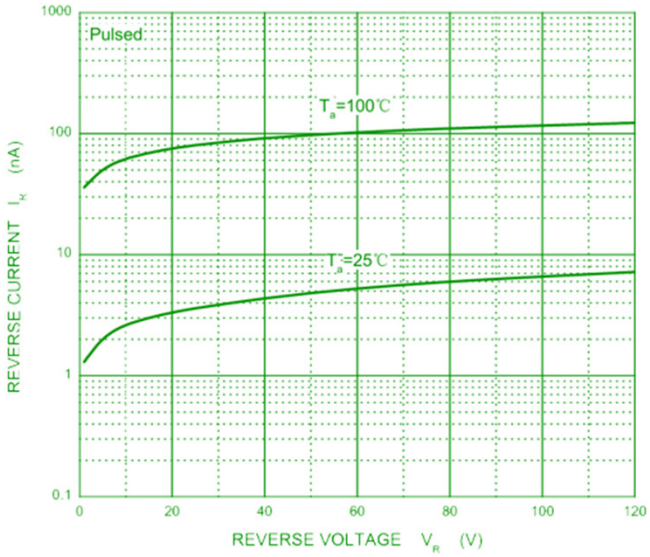


Fig 2. Reverse Characteristics

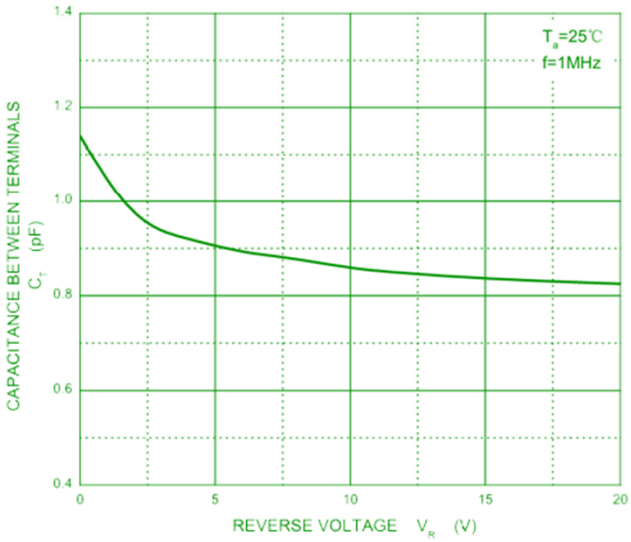


Fig 3. Capacitance Characteristics

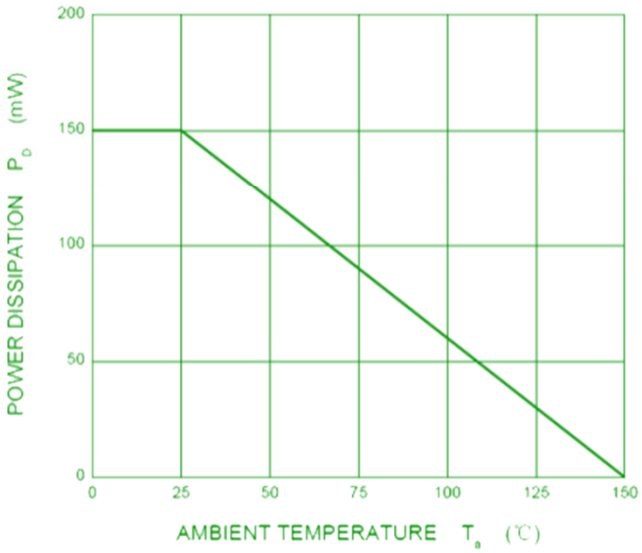
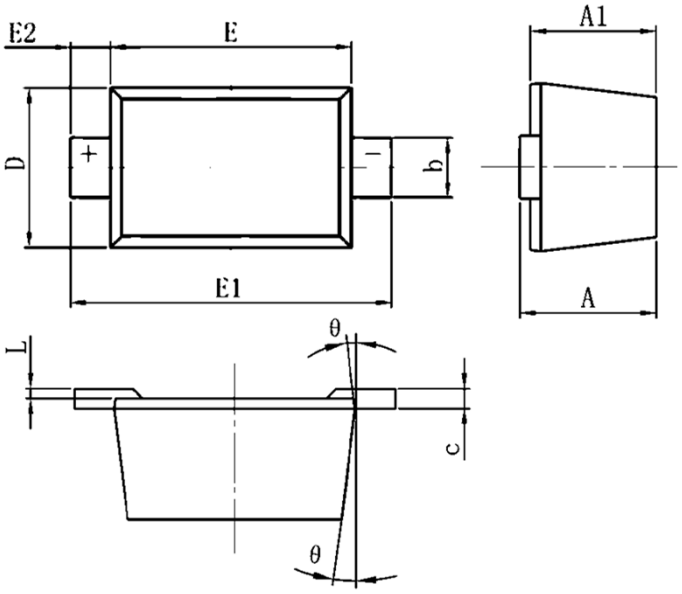
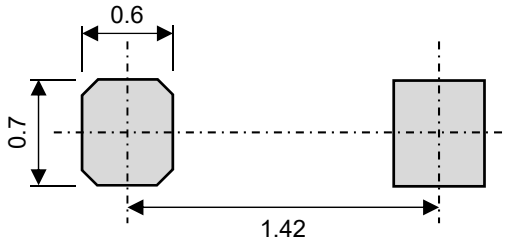


Fig 4. Power Derating Curve

Product Dimension (SOD-523)



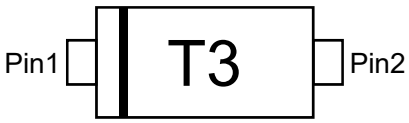
Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.51	0.77	0.020	0.031
A1	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
C	0.08	0.15	0.003	0.006
D	0.75	0.85	0.030	0.033
E	1.10	1.30	0.043	0.051
E1	1.50	1.70	0.059	0.067
E2	0.20 REF		0.008 REF	
L	0.01	0.07	0.001	0.003
θ	7° REF		7° REF	



Suggested PCB Layout

Unit: mm

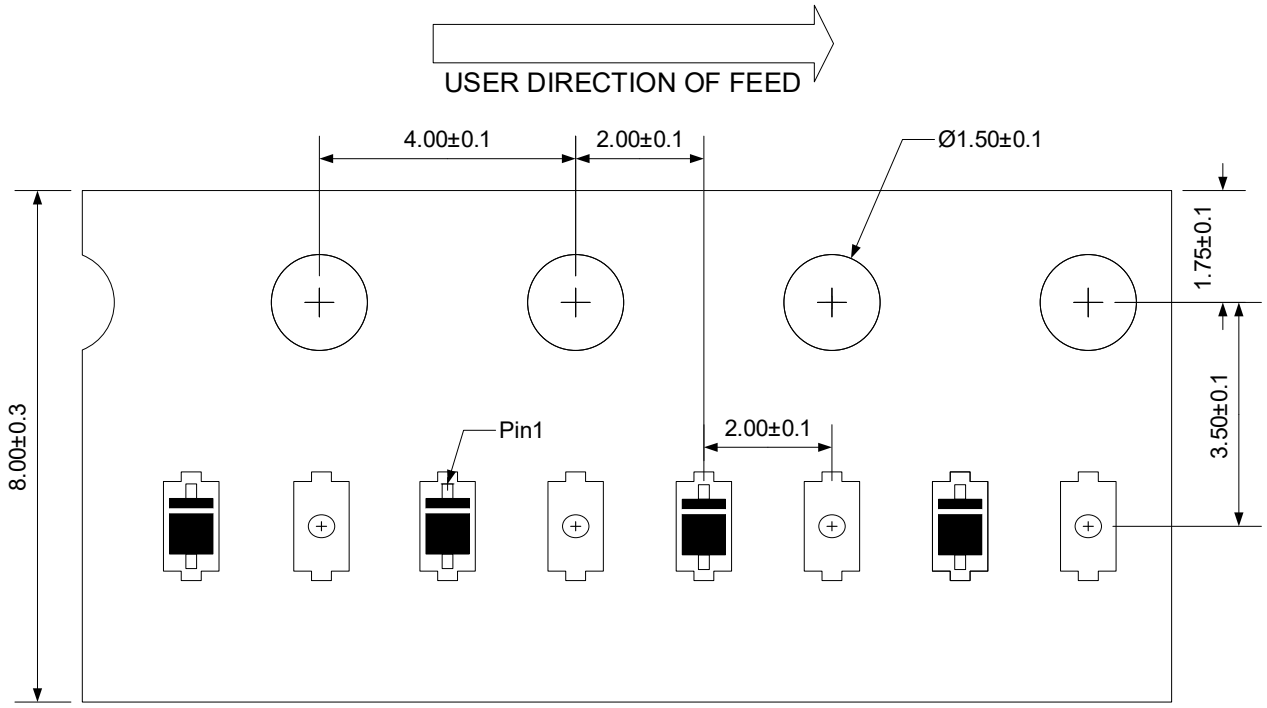
Marking information



Ordering information

Package	Reel	Shipping
SOD-523	7"	3000 / Tape & Reel

Load with information



Unit:mm

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