

Zener Voltage Regulators

Description

The PZ3D5V6H is packaged in a SOD-323 surface mount package that has a power dissipation of 200mW. They are designed to provide voltage regulation protection and are especially attractive in situations where space is at a premium.



Feature

- Standard zener breakdown voltage range 5.6V
- ➤ SOD-323 package
- Steady state power rating of 200mW
- ➤ ESD rating of class 3(>16kV)per human body model
- > RoHS compliant transient

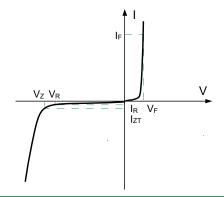
Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- ➤ Qualified max reflow temperature:260 °C
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um
- ▶ Pin flatness:≤3mil

Applications

- Cellular phones
- > Hand held portables
- High density PC boards

Electronics Parameter



Electrical characteristics per line@(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Zener Voltage	Vz	I _{ZT} = 5mA	5.2	5.6	6.0	V
Maximum Zener Impedance	Z _{ZT}	I _{ZT} = 5mA	-	-	40	Ω
Maximum Zener Impedance	Z _{ZK}	I _{ZK} =1mA	-	-	400	Ω
Reverse Leakage Current	I _R	V _R =2V	-	-	1.0	μA
Forward Voltage	V _F	I _F = 10mA	-	-	0.9	V

Absolute maximum rating@25℃

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P _D	200	mW
Thermal Resistance, Junction-to-Ambient	Roja	625	°C/W
Junction Temperature	TJ	150	°C
Storage Temperature	Тѕтс	-55 to +150	$^{\circ}$

Typical Characteristics

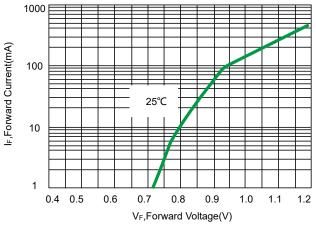
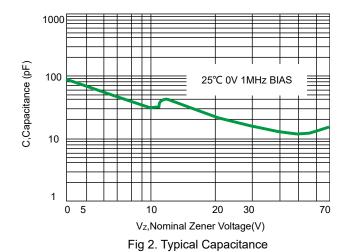


Fig 1.Typical Forward Voltage



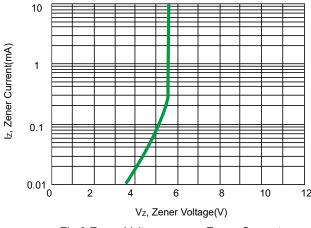


Fig 3.Zener Voltage versus Zener Current

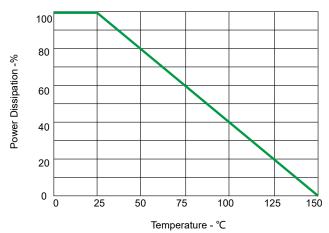
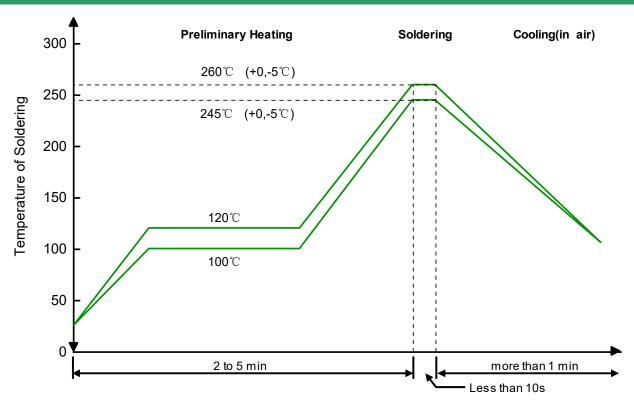


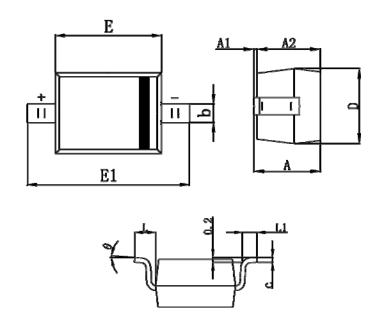
Fig 4.Steady State Power Detating

Solder Reflow Recommendation

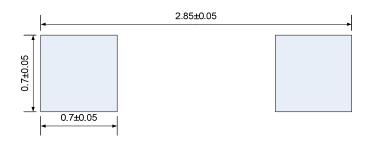


Remark: Pb free for 260°C; Pb for 245°C.

Product dimension (SOD-323)



Dim	Incl	nes	Millimeters		
Dim	MIN	MAX	MIN	MAX	
Α	-	1.000	-	0.039	
A1	0.000	0.100	0.000	0.004	
A2	0.800	0.900	0.031	0.035	
b	0.250	0.350	0.010	0.014	
С	0.080	0.150	0.003	0.006	
D	1.200	1.400	0.047	0.055	
Е	1.600	1.800	0.063	0.071	
E1	2.550	2.750	0.100	0.108	
L	0.475 Ref.		0.019 Ref.		
θ	0°	8°	0°	8°	



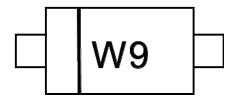
Suggested PCB Layout

Unit:mm

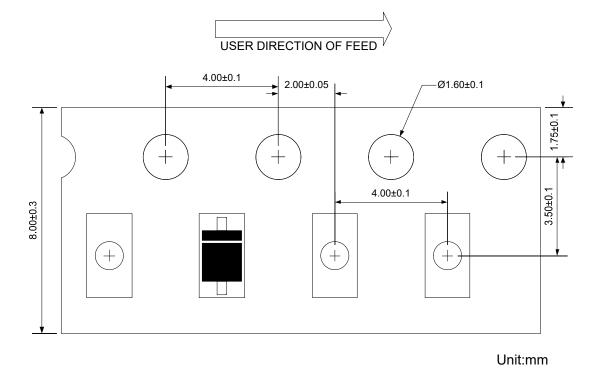
Ordering information

Device	Package	Shipping	
PZ3D5V6H	SOD-323 (Pb-Free)	3000 / Tape & Reel	

Marking information



Load with information



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