

Zener Voltage Regulator

Description

The PZ3D7V5H is packaged in a SOD-323 surface mount package that has a power dissipation of 500mW. 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 7.5V
- ➤ SOD-323 package
- Steady state power rating of 500mW
- > ESD rating of class 3(>16kV)per human body model
- > RoHS compliant transient

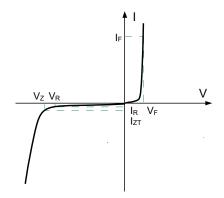
Applications

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

Mechanical Characteristics

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

Electronics Parameter



Electrical characteristics per line@(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Zener Voltage	Vz	I _{ZT} = 5mA	-	7.5	-	V
Maximum Zener Impedance	Z _{ZT}	I _{ZT} = 5mA	-	-	6.5	Ω
Maximum Zener Impedance	Zzĸ	I _{ZK} =1mA	-	-	30	Ω
Reverse Leakage Current	I _R	V _R =5.5V	-	-	1	μΑ
Forward Voltage	V _F	I _F = 50mA	-	0.9	-	V
Capacitance	С	V _R =0V, f = 1MHz	-	-	250	pF

Absolute maximum rating@25℃

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P _D	500	mW
Thermal Resistance,Juction-to-Ambient	Roja	250	°C/W
Storage Temperature	T _J ,T _{STG}	-65 to +150	°C

Typical Characteristics

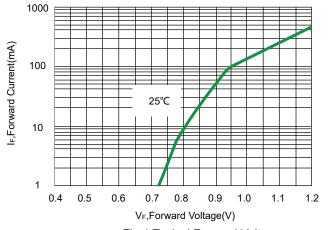


Fig 1.Typical Forward Voltage

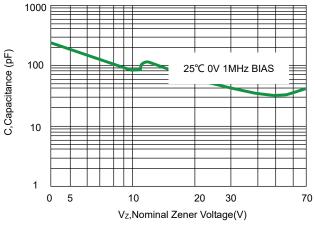


Fig 2. Typical Capacitance

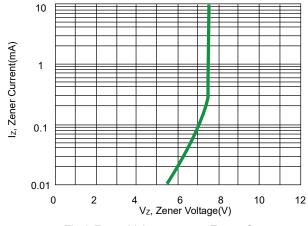


Fig 3.Zener Voltage versus Zener Current

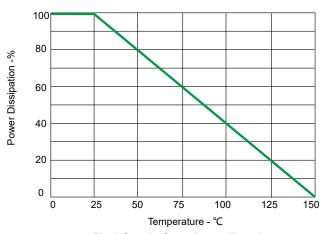
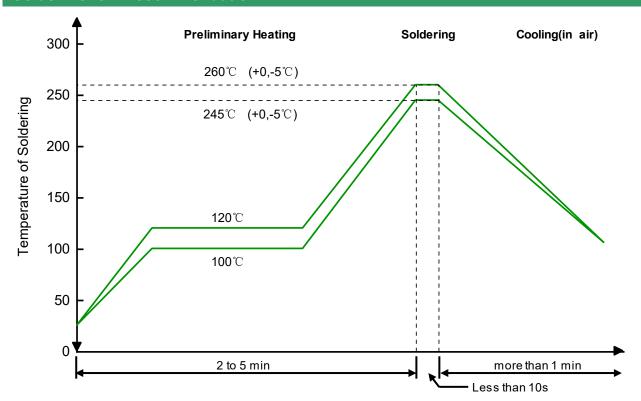


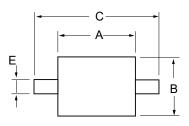
Fig 4.Steady State Power Detating

Solder Reflow Recommendation

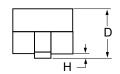


Remark: Pb free for 260°C; Pb for 245°C.

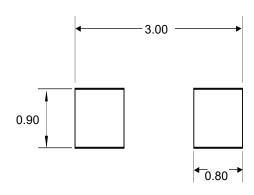
Product dimension (SOD-323)







Dim	Incl	nes	Millimeters		
	MIN	MAX	MIN	MAX	
Α	0.063	0.075	1.60	1.90	
В	0.045	0.057	1.15	1.45	
С	0.090	0.106	2.30	2.70	
D	0.031	0.043	0.80	1.00	
E	0.010	0.01	0.25	0.40	
F	0.004	0.007	0.09	0.18	
Н	0.000	0.004	0.00	0.10	



Suggested PCB Layout

Unit:mm

Marking information



Ordering information

Device	Package	Reel	Shipping
PZ3D7V5H	SOD-323 (Pb-Free)	7"	3000 / Tape & Reel

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