

## **Zener Voltage Regulators**

### **Description**

The PZ3D4V2H 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 5.1V
- 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)

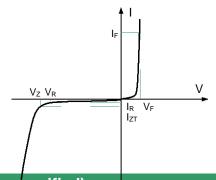
Mounting position: Any

➤ 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 <sub>ZT</sub> = 5mA		5.1		V
Maximum Zener Impedance	Z <sub>ZT</sub>	I <sub>ZT</sub> = 5mA	-	-	55	Ω
Maximum Zener Impedance	Z <sub>ZK</sub>	$I_{ZK} = 0.5 \text{mA}$	-	-	500	Ω
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =4.2V	-	-	5	μΑ
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 100mA	-	-	1.25	V
Max.Capacitance	С	V <sub>R</sub> =4V, f = 1MHz	-	-	300	pF

# Absolute maximum rating@25℃

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P <sub>D</sub>	500	mW
Thermal Resistance, Junction-to-Ambient	R <sub>OJA</sub>	300	°C/W
Storage Temperature	$T_J, T_STG$	-65 to +150	$^{\circ}$

## **Typical Characteristics**

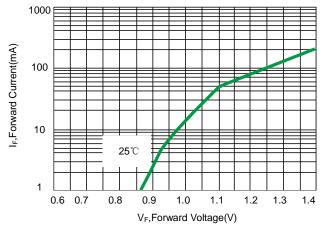


Fig 1. Typical Forward Voltage

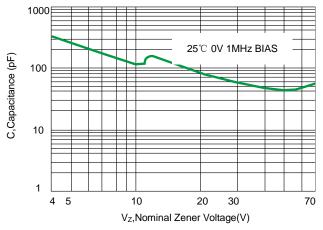


Fig 2. Typical Capacitance

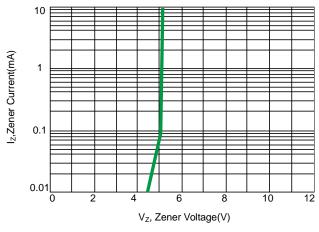


Fig 3.Zener Voltage versus Zener Current

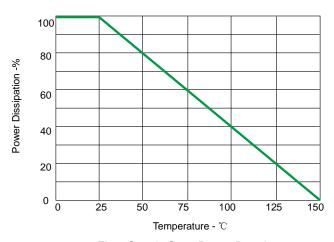
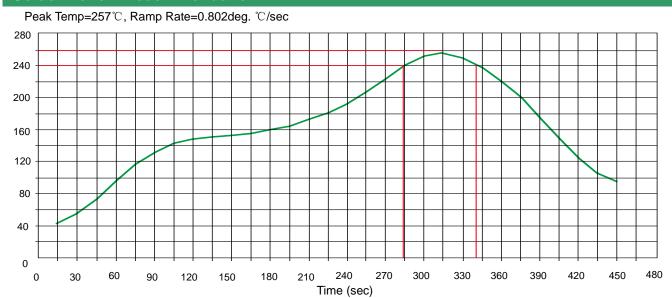
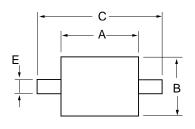


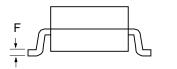
Fig 4.Steady State Power Detating

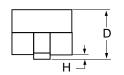
## **Solder Reflow Recommendation**



## **Product dimension (SOD-323)**

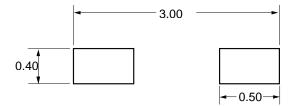






Dim	Incl	nes	Millimeters		
Dilli	MIN	MAX	MIN	MAX	
Α	0.063	0.075	1.60	1.90	
В	0.045	0.057	1.15	1.45	
С	0.090	0.106	2.30	2.70	
D	0.031	0.043	0.80	1.00	
Е	0.010	0.01	0.25	0.40	
F	0.004	0.007	0.09	0.18	
Н	0.000	0.004	0.00	0.10	

Unit:mm



## Ordering information

Device	Package	Shipping		
PZ3D4V2H	SOD-323 (Pb-Free)	3000 / Tape & Reel		

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