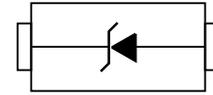


**Description**

The PZ3D6V8H 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 6.8V
- SOD-323 package
- Steady state power rating of 500mW
- ESD rating of class 3(>16kV)per human body model
- RoHS compliant transient

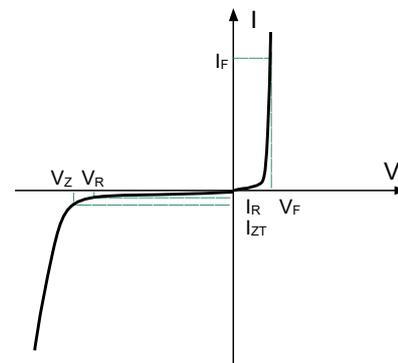
**Applications**

- 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.	Typ.	Max.	Units
Reverse Zener Voltage	V <sub>Z</sub>	I <sub>ZT</sub> = 5mA	-	6.8	-	V
Maximum Zener Impedance	Z <sub>ZT</sub>	I <sub>ZT</sub> = 5mA	-	-	40	Ω
Maximum Zener Impedance	Z <sub>ZK</sub>	I <sub>ZK</sub> = 1mA	-	-	500	Ω
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 4V	-	-	2	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 10mA	-	0.8	-	V
Capacitance	C	V <sub>R</sub> = 0V, f = 1MHz	-	80	-	pF

## Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	$P_D$	500	mW
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	635	°C/W
Storage Temperature	$T_J, T_{STG}$	-65 to +150	°C

## Typical Characteristics

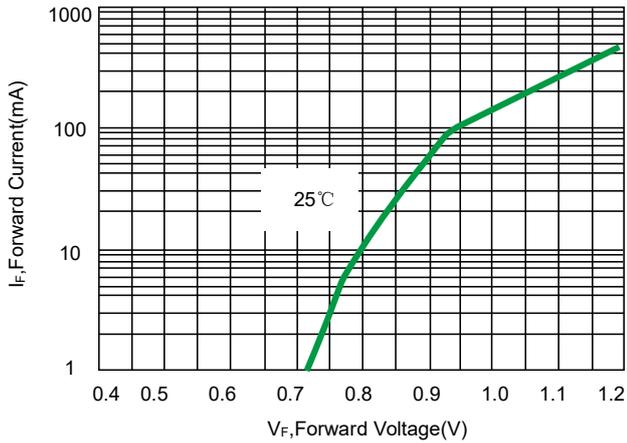


Fig 1. Typical Forward Voltage

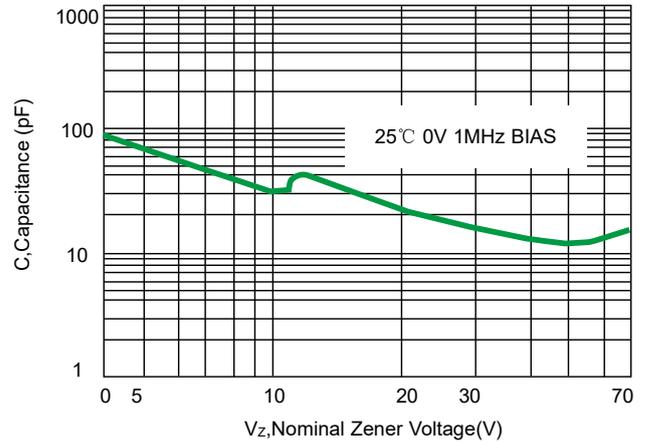


Fig 2. Typical Capacitance

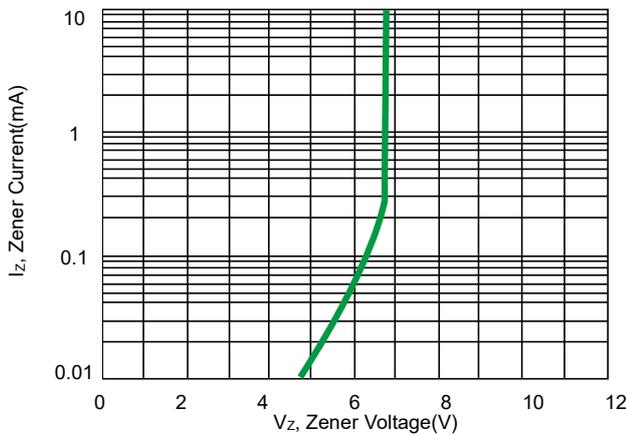


Fig 3. Zener Voltage versus Zener Current

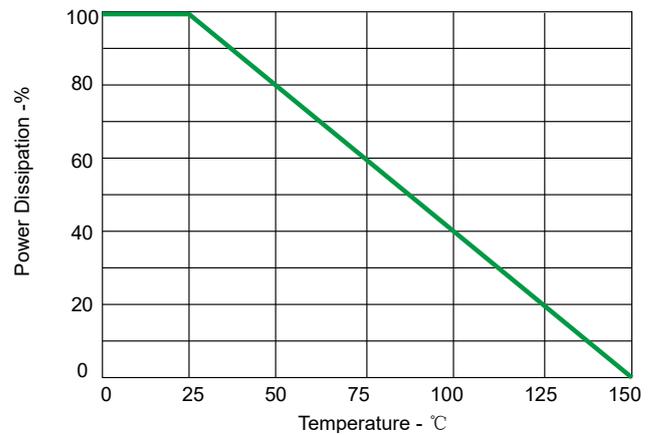
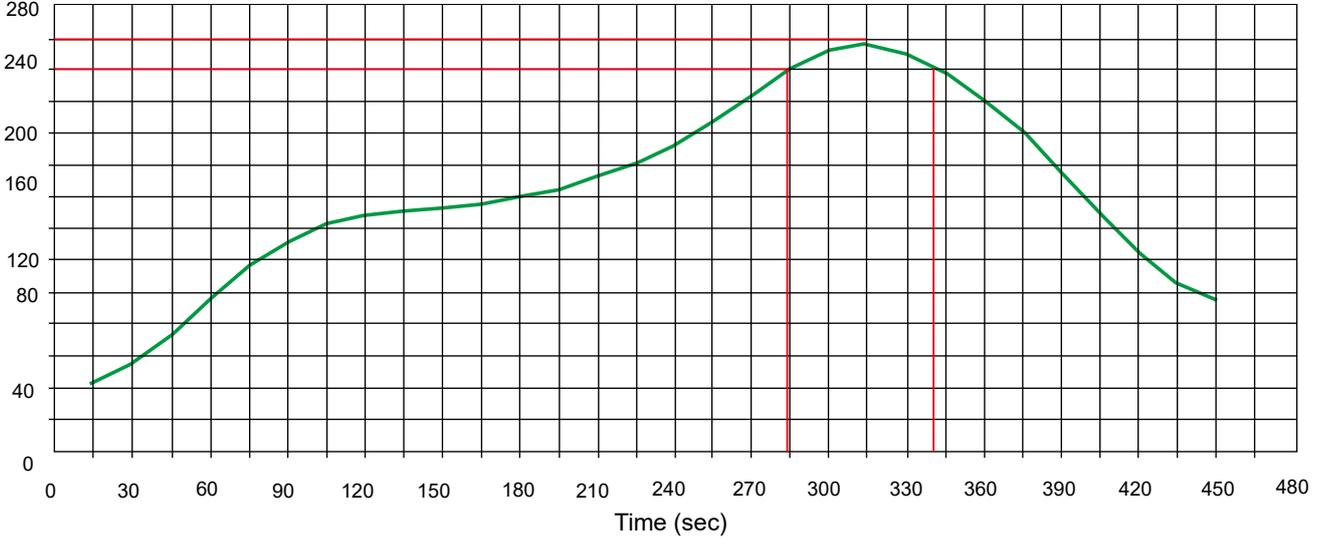


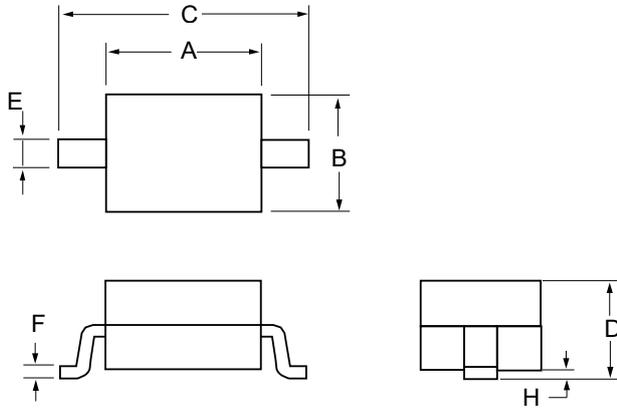
Fig 4. Steady State Power Detating

Solder Reflow Recommendation

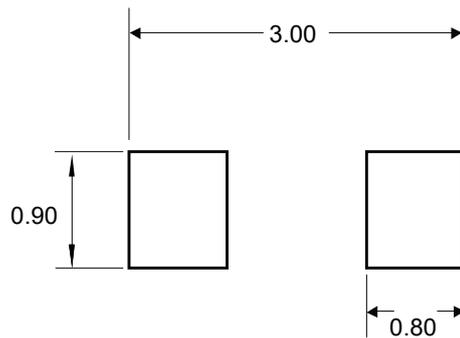
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension (SOD-323)



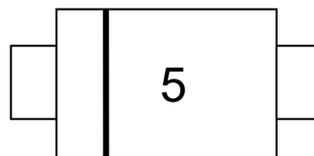
Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.063	0.075	1.60	1.90
B	0.045	0.057	1.15	1.45
C	0.090	0.106	2.30	2.70
D	0.031	0.043	0.80	1.00
E	0.010	0.01	0.25	0.40
F	0.004	0.007	0.09	0.18
H	0.000	0.004	0.00	0.10



Suggested PCB Layout

Unit:mm

Marking information



Ordering information

Device	Package	Reel	Shipping
PZ3D6V8H	SOD-323 (Pb-Free)	7"	3000 / Tape & Reel

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