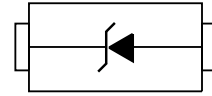


Description

The PZ3D18VH 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 18V
- SOD-323 package
- Steady state power rating of 200mW
- ESD rating of class 3(>8kV) per human body model
- RoHS compliant transient

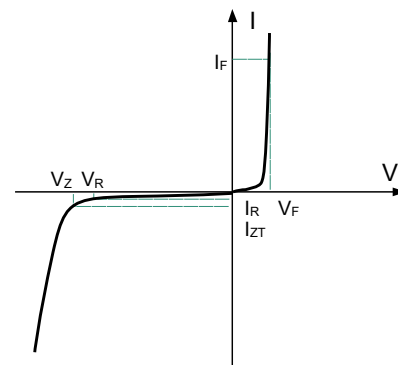
Applications

- 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_Z	$I_{ZT} = 5mA$	16.8	18	19.1	V
Maximum Zener Impedance	Z_{ZT}	$I_{ZT} = 5mA$	-	-	45	Ω
Maximum Zener Impedance	Z_{ZK}	$I_{ZK} = 1mA$	-	-	225	Ω
Reverse Leakage Current	I_R	$V_R = 12.6V$	-	-	0.1	μA
Forward Voltage	V_F	$I_F = 10mA$	-	0.75	-	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$	-	150	200	pF

Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P_D	200	mW
Storage Temperature	T_J, T_{STG}	-55 to +150	°C

Typical Characteristics

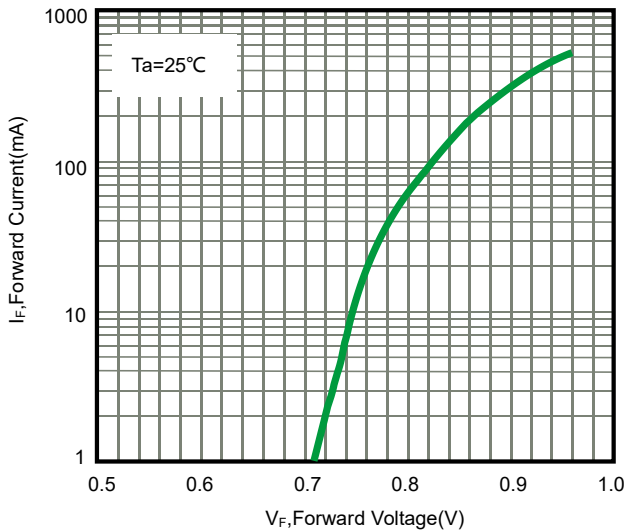


Fig 1. Typical Forward Voltage

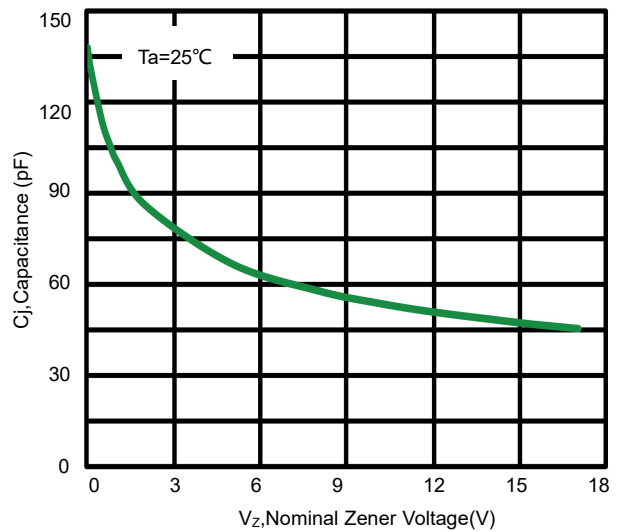


Fig 2. Typical Capacitance

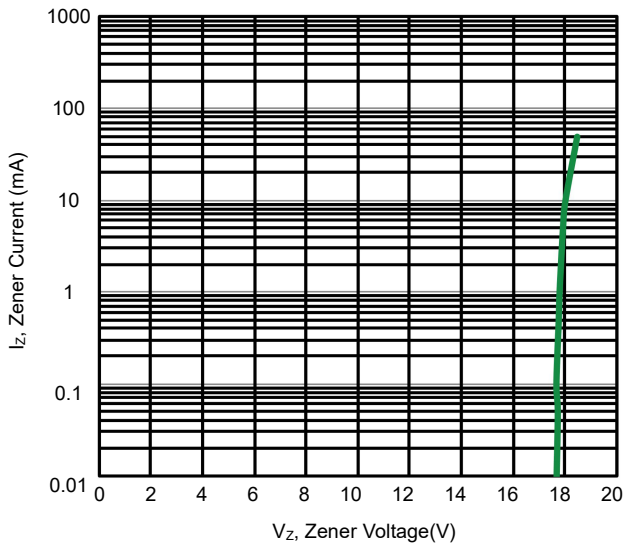


Fig 3. Zener Voltage versus Zener Current

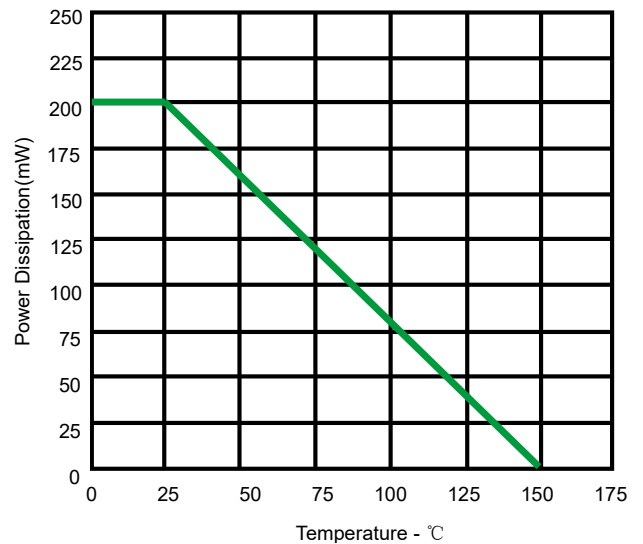
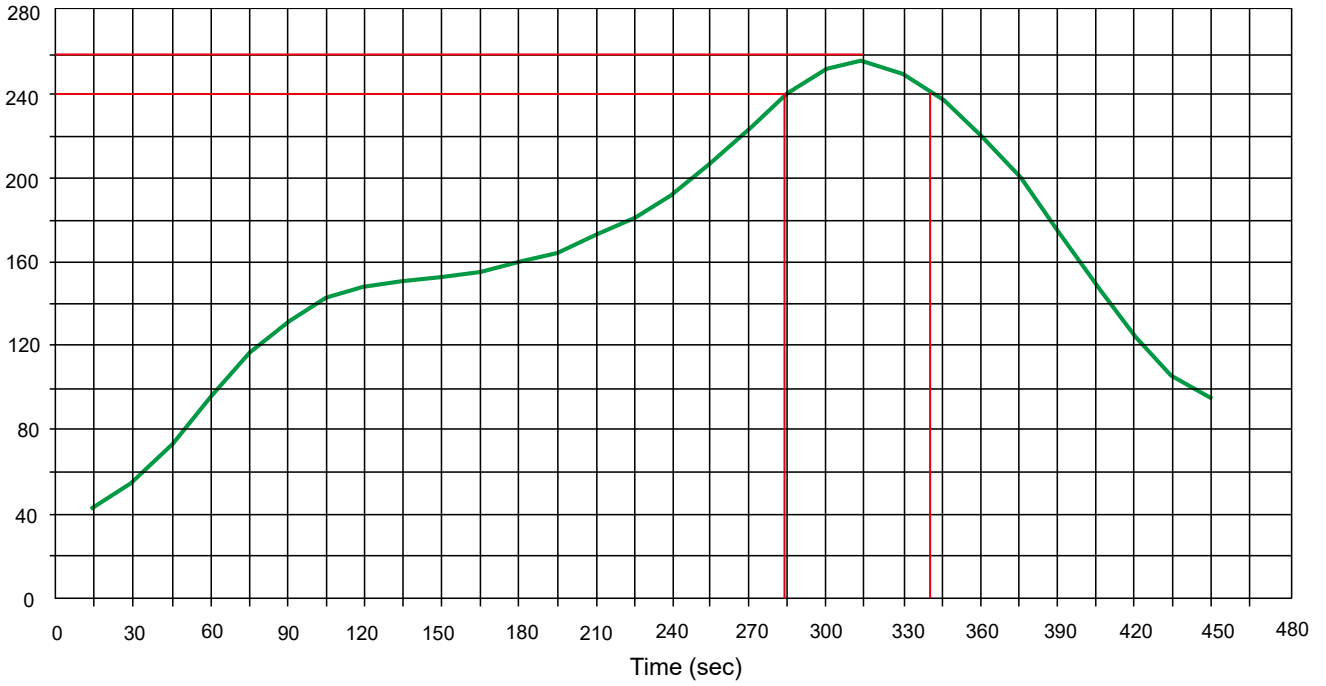


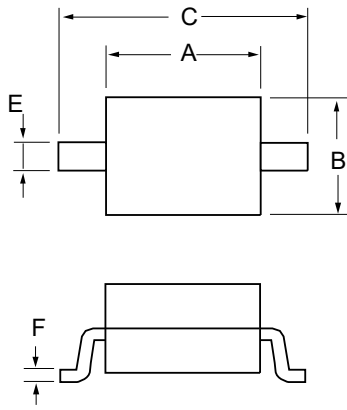
Fig 4. Steady State Power Detating

Solder Reflow Recommendation

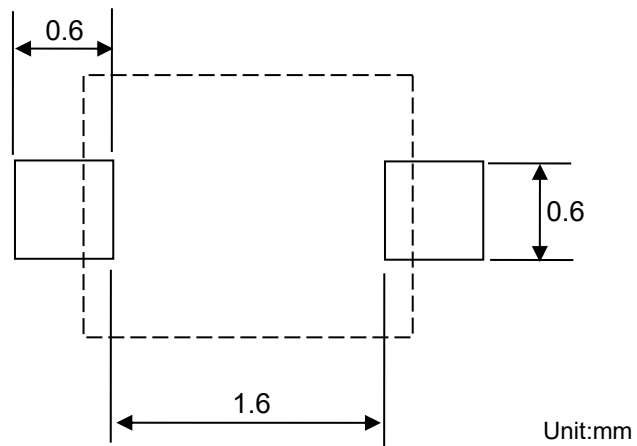
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension (SOD-323)



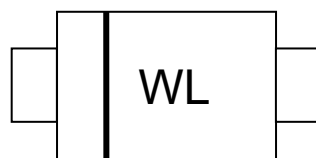
Dim	Millimeters	
	MIN	MAX
A	1.60	1.95
B	1.10	1.50
C	2.50	2.85
D	0.80	1.15
E	0.25	0.45
F	0.10	0.15
H	0.00	0.10



Unit:mm

Suggested PCB Layout


Marking information



Ordering information

Device	Package	Reel	Shipping
PZ3D18VH	SOD-323 (Pb-Free)	7"	3000 / Tape & Reel


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