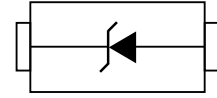


### Description

The PZ1D15VH is packaged in a SOD-123 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 15V
- SOD-123 package
- Steady state power rating of 500mW
- ESD rating of class 3(>16kV)per human body model
- RoHS compliant transient

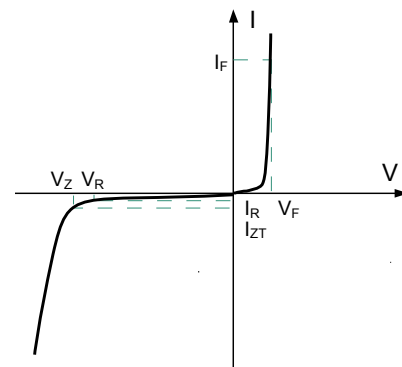
### Applications

- 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
- Device meets MSL 1 requirements
- 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	$V_Z$	$I_{ZT} = 5mA$		15		V
Maximum Zener Impedance	$Z_{ZT}$	$I_{ZT} = 5mA$	-	-	40	$\Omega$
Maximum Zener Impedance	$Z_{ZK}$	$I_{ZK} = 0.5mA$	-	-	400	$\Omega$
Reverse Leakage Current	$I_R$	$V_R = 11V$	-	-	0.1	$\mu A$
Forward Voltage	$V_F$	$I_F = 100mA$	-	-	1.25	V
Max. Capacitance	C	$V_R = 4V, f = 1MHz$	-	-	300	pF

## Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board(Note 1)	$P_D$	500	mW
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	340	°C/W
Storage Temperature	$T_J, T_{STG}$	-65 to +150	°C

## Typical Characteristics

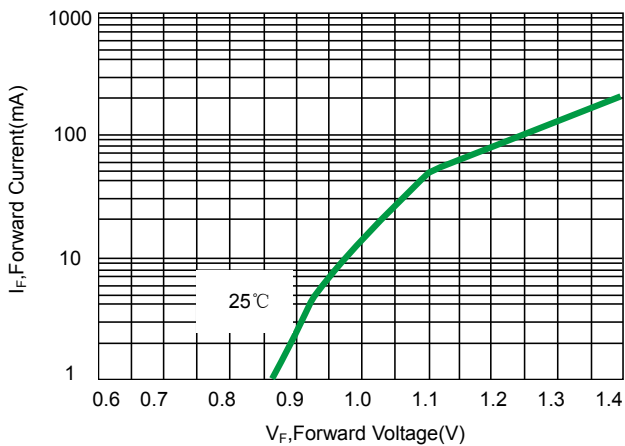


Fig 1. Typical Forward Voltage

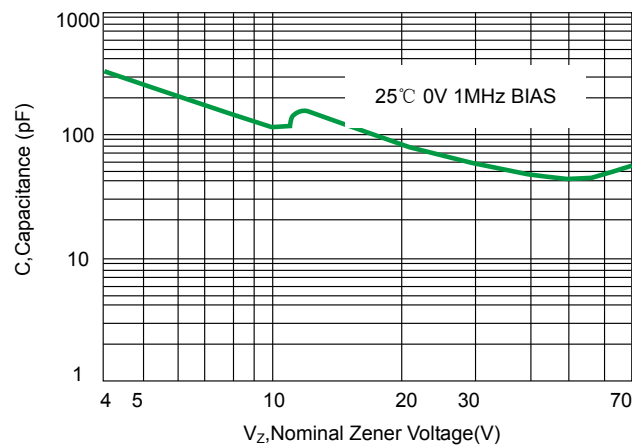


Fig 2. Typical Capacitance

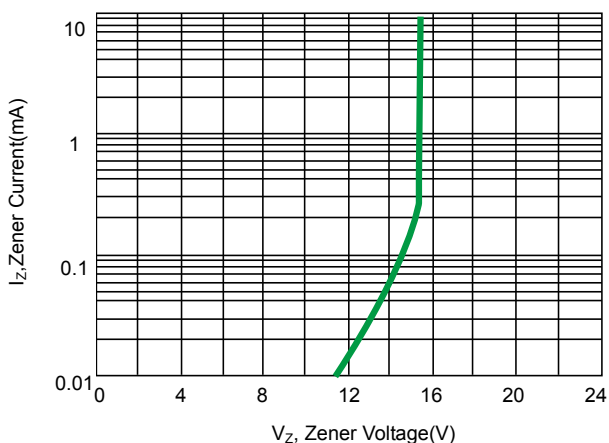


Fig 3. Zener Voltage versus Zener Current

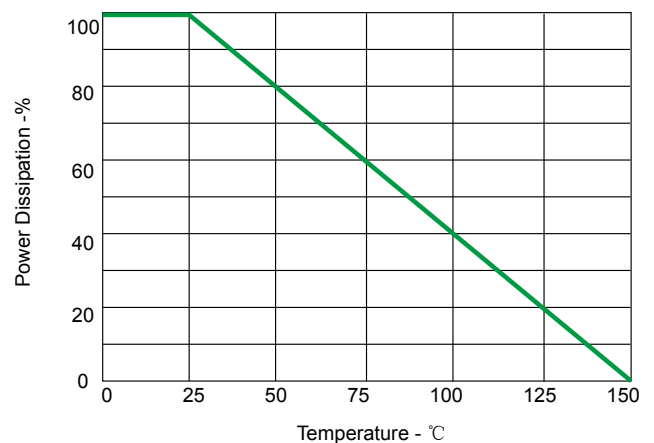
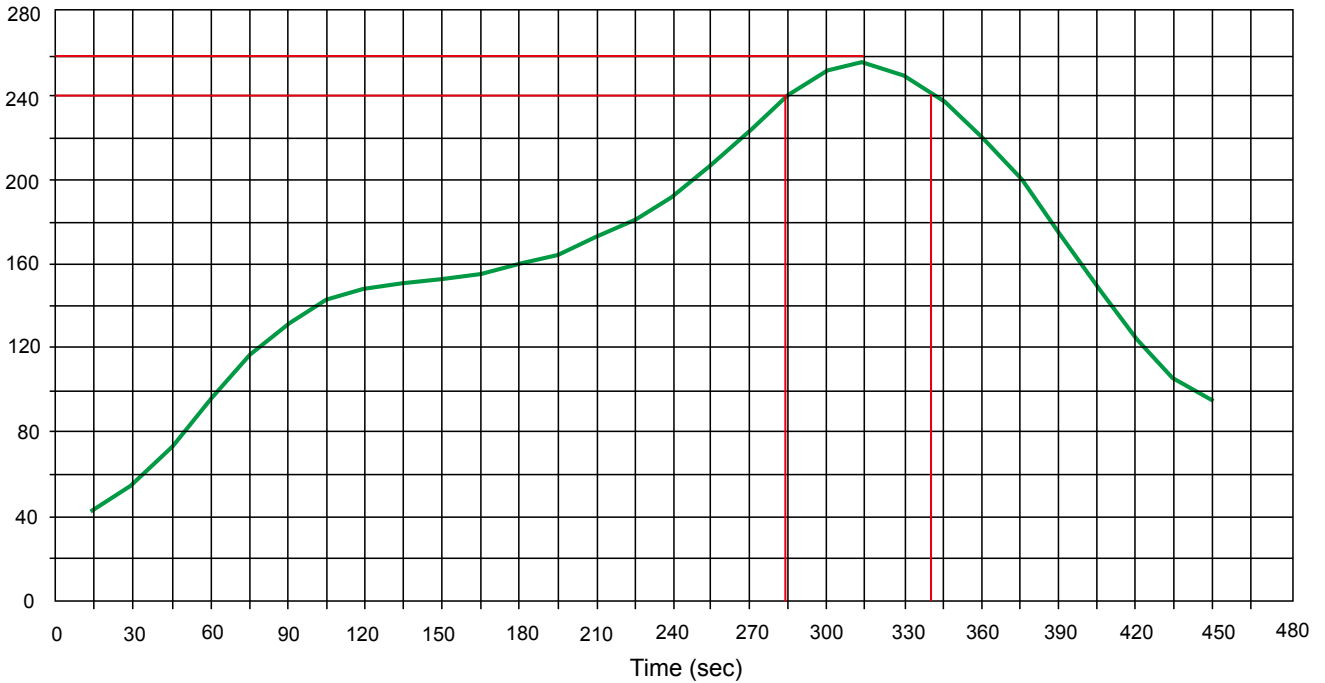


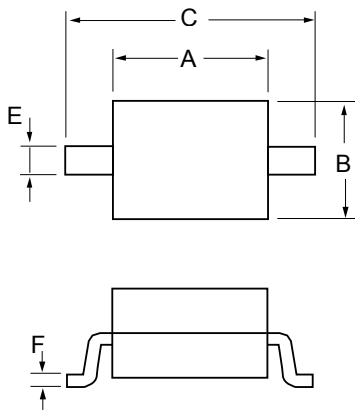
Fig 4. Steady State Power Detating

Solder Reflow Recommendation

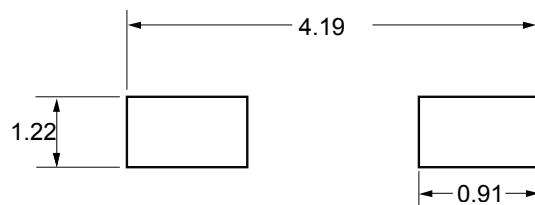
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension (SOD-123)



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.100	0.112	2.54	2.84
B	0.055	0.071	1.40	1.80
C	0.140	0.152	3.56	3.86
D	0.037	0.053	0.94	1.35
E	0.020	0.028	0.51	0.71
F	-	0.006	-	0.15
H	0.000	0.004	0.00	0.10




Unit:mm

## Ordering information

<b>Device</b>	<b>Package</b>	<b>Shipping</b>
PZ1D15VH	SOD-123 (Pb-Free)	3000 / Tape & Reel


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