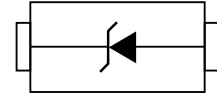


Description

The PZ1D24VH 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 24V
- SOD-123 package
- Steady state power rating of 500mW
- ESD rating of class 3(>16kV)per human body model
- RoHS compliant transient

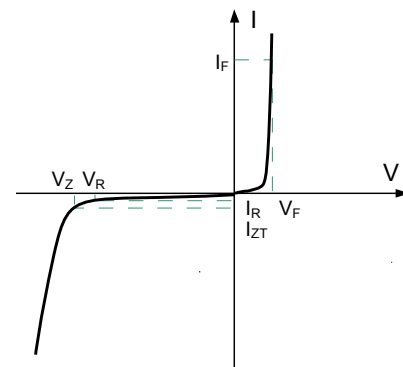
Applications

- 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		24		V
Maximum Zener Impedance	Z _{ZT}	I _{ZT} = 5mA	-	-	70	Ω
Maximum Zener Impedance	Z _{ZK}	I _{ZK} =0.5mA	-	-	120	Ω
Reverse Leakage Current	I _R	V _R =16.8V	-	-	0.1	μA
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

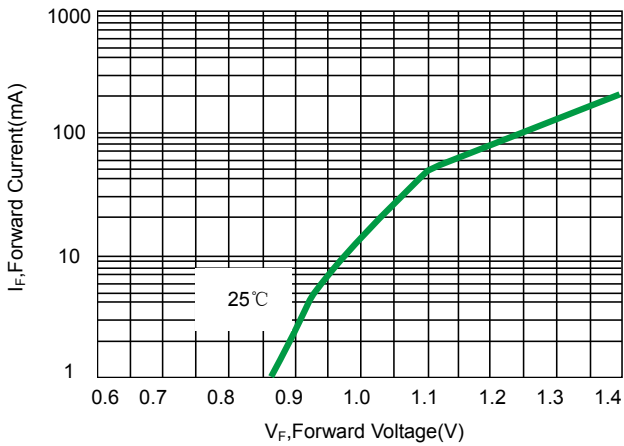


Fig 1. Typical Forward Voltage

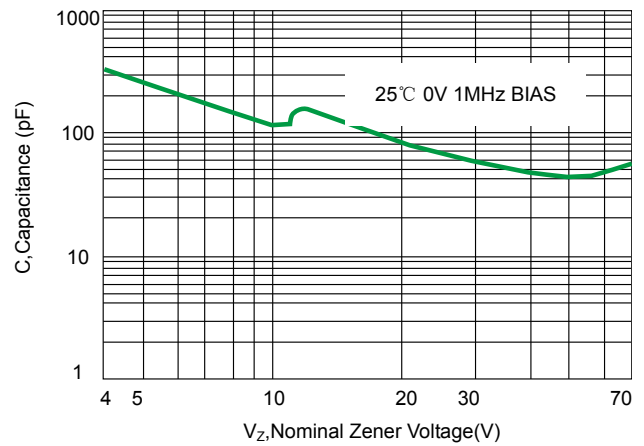


Fig 2. Typical Capacitance

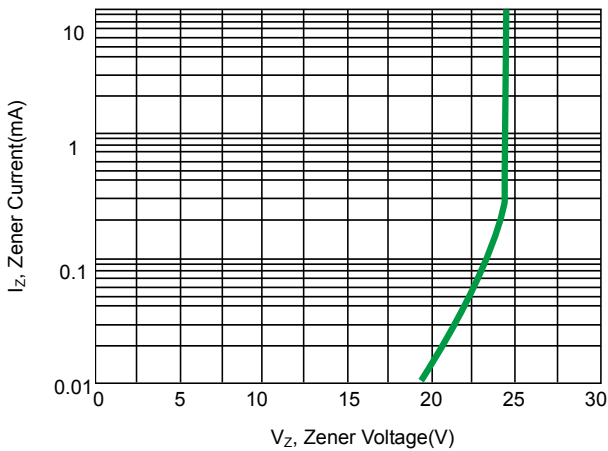


Fig 3. Zener Voltage versus Zener Current

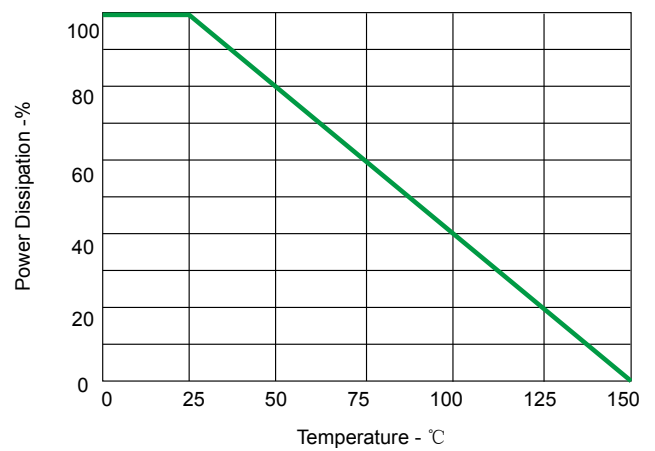
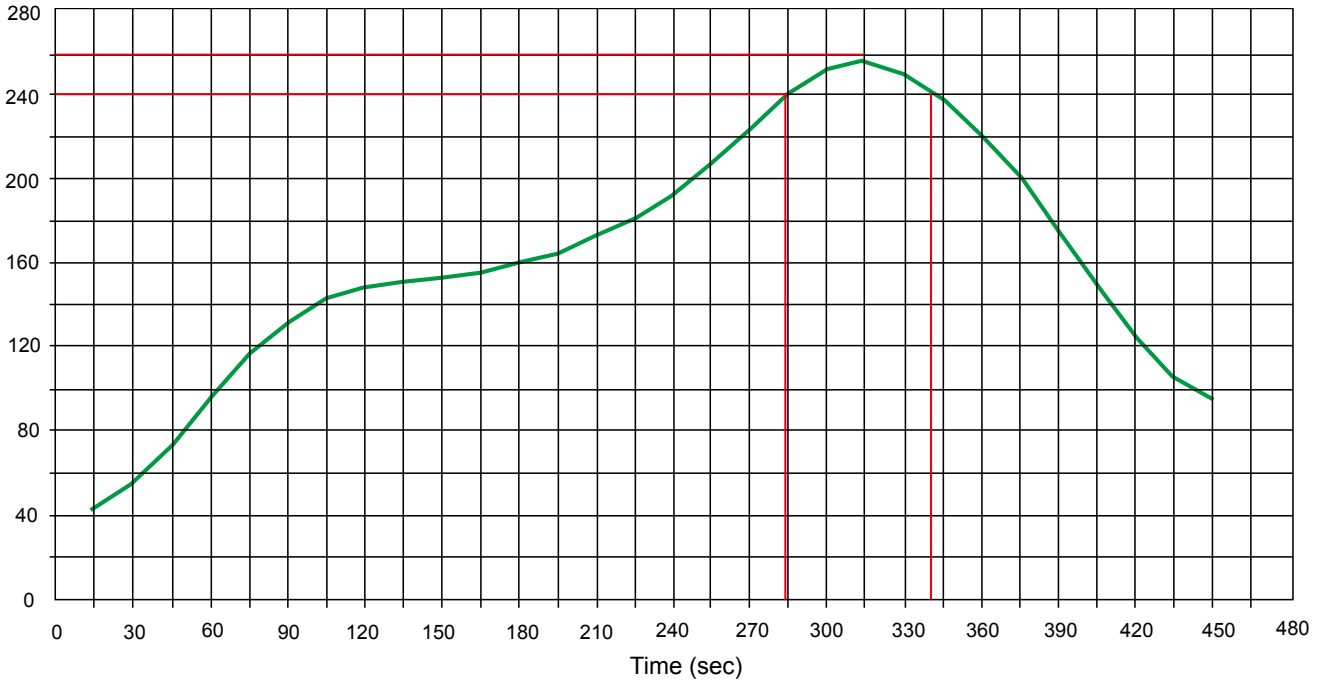


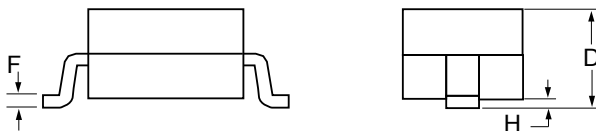
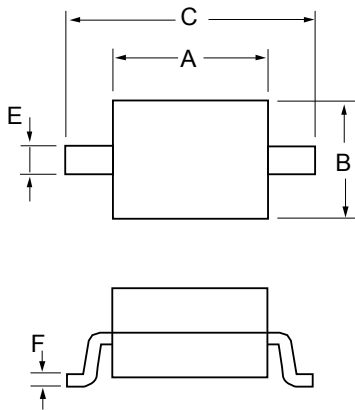
Fig 4. Steady State Power Detating

Solder Reflow Recommendation

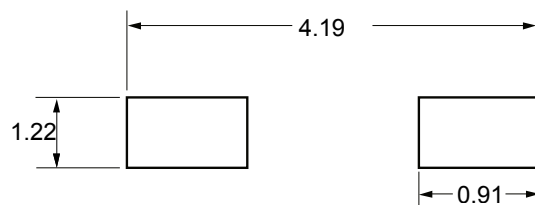
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



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

Device	Package	Shipping
PZ1D24VH	SOD-123 (Pb-Free)	3000 / Tape & Reel


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