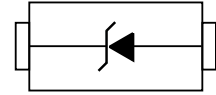


Description

The PZ9D4V2H is packaged in a SOD-923 surface mount package that has a power dissipation of 260mW. 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-923 package
- Steady state power rating of 260mW
- ESD rating of class 3(>16kV)per human body model
- RoHS compliant transient

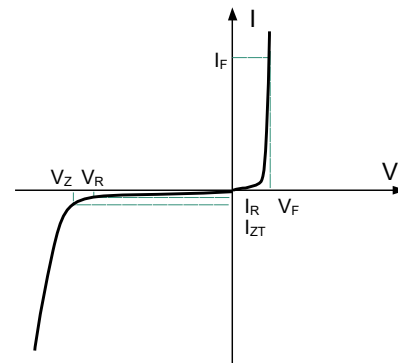
Applications

- 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	$I_{ZT} = 5mA$		5.1		V
Maximum Zener Impedance	Z_{ZT}	$I_{ZT} = 5mA$	-	-	40	Ω
Maximum Zener Impedance	Z_{ZK}	$I_{ZK} = 1.0mA$	-	-	200	Ω
Reverse Leakage Current	I_R	$V_R = 4.2V$	-	-	2	μA
Forward Voltage	V_F	$I_F = 10mA$	-	-	1.25	V
Max. Capacitance	C	$V_R = 0V, f = 1MHz$	-	-	150	pF

Absolute maximum rating@25°C

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P_D	260	mW
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	635	°C/W
Storage Temperature	T_J, T_{STG}	-65 to +150	°C

Typical Characteristics

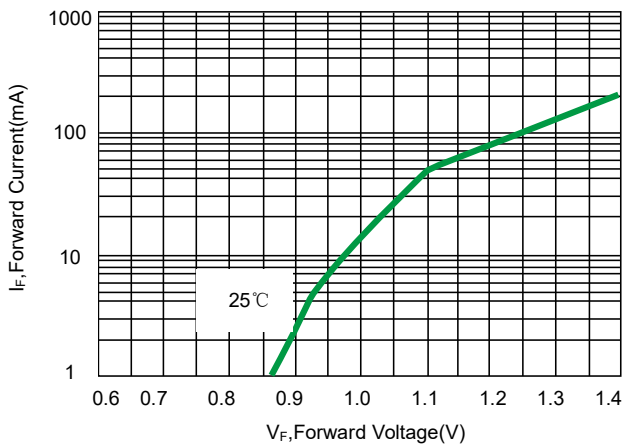


Fig 1. Typical Forward Voltage

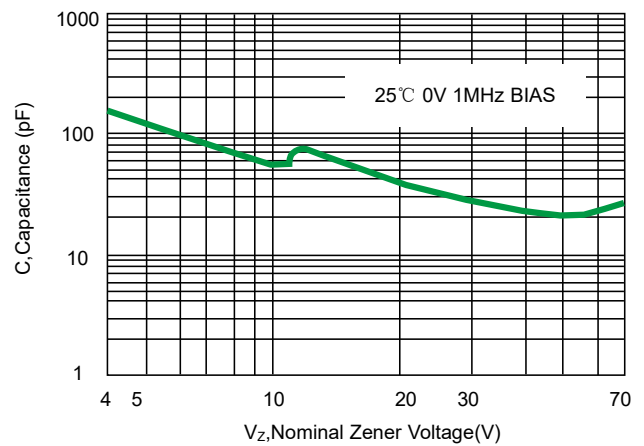


Fig 2. Typical Capacitance

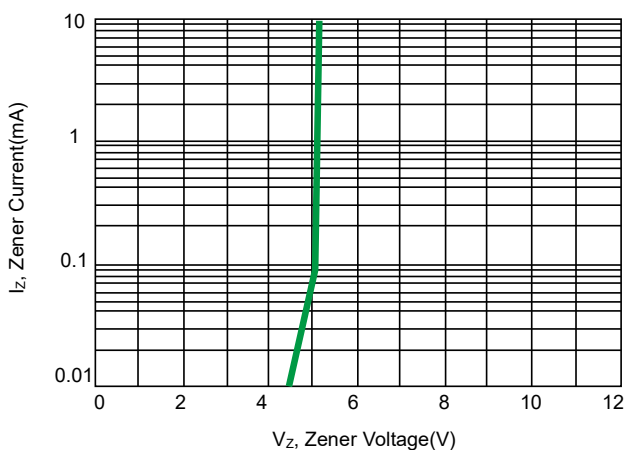


Fig 3. Zener Voltage versus Zener Current

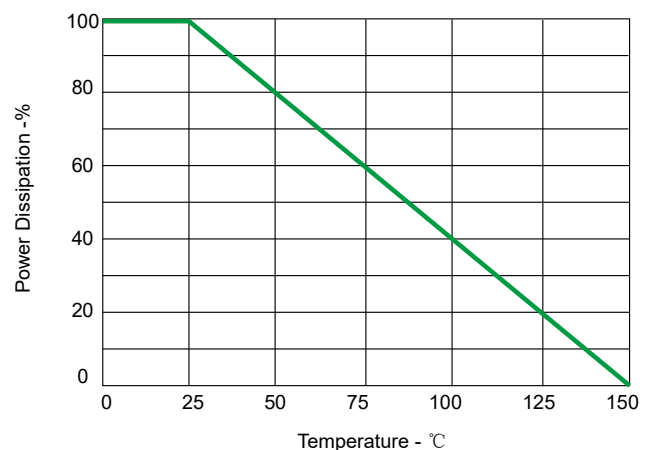
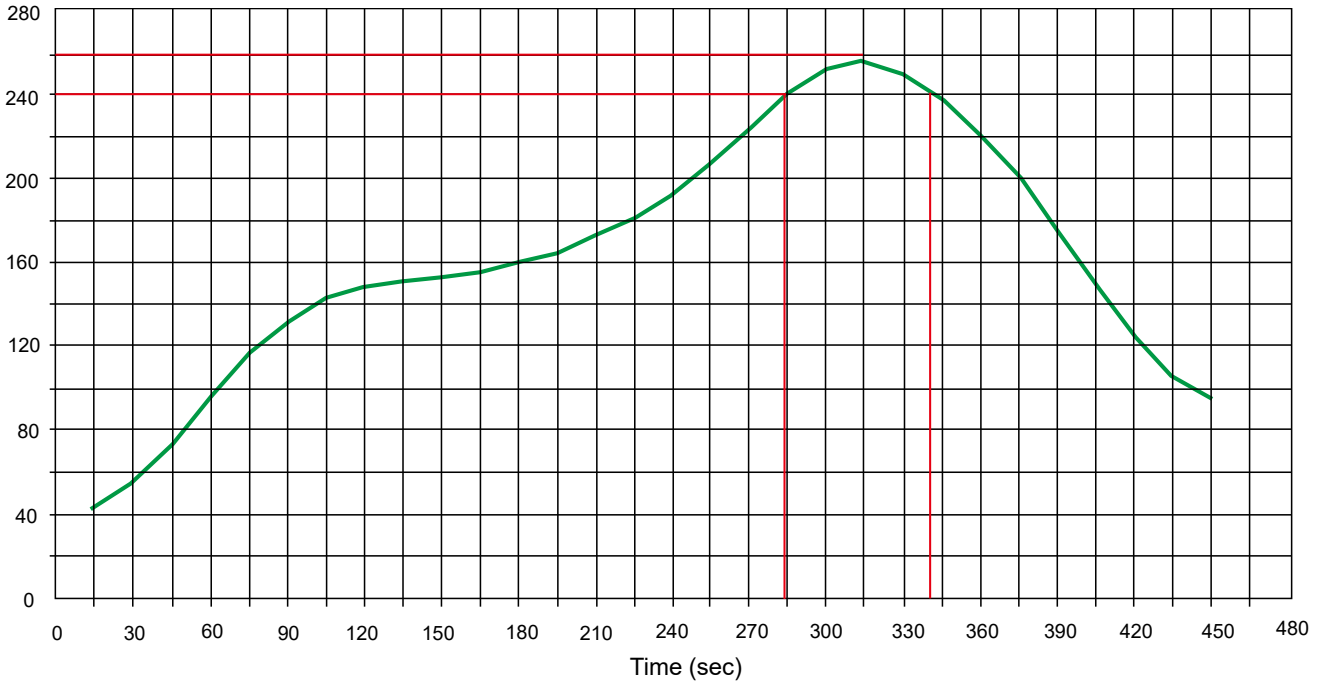


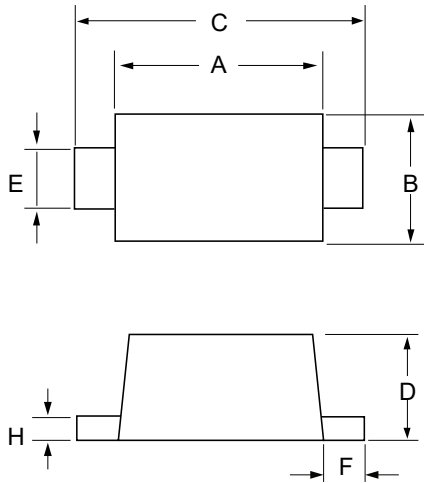
Fig 4. Steady State Power Detating

Solder Reflow Recommendation

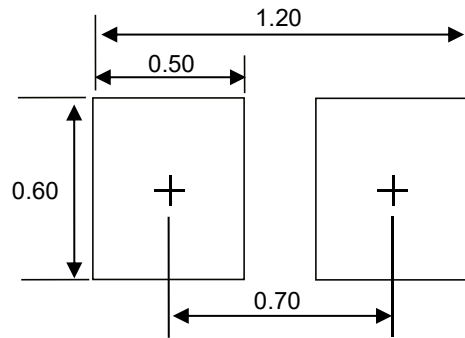
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension (SOD-923)



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.030	0.033	0.75	0.85
B	0.022	0.026	0.55	0.65
C	0.037	0.041	0.95	1.05
D	0.014	0.017	0.36	0.43
E	0.006	0.010	0.15	0.25
F	0.002	0.006	0.05	0.15
H	0.003	0.007	0.07	0.17




Unit:mm

Suggested PCB Layout

Ordering information

Device	Package	Shipping
PZ9D4V2H	SOD-923 (Pb-Free)	8000 / Tape & Reel


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