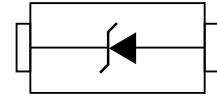


Description

The PZ5D8V2H is packaged in a SOD-523 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 8.2V
- SOD-523 package
- Steady state power rating of 500mW
- RoHS compliant transient

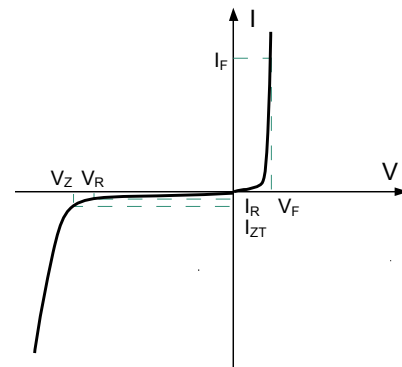
Applications

- 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	$I_{ZT} = 5mA$	7.8	8.2	8.6	V
Maximum Zener Impedance	Z_{ZT}	$I_{ZT} = 5mA$	-	-	15	Ω
Maximum Zener Impedance	Z_{ZK}	$I_{ZK} = 1mA$	-	-	80	Ω
Reverse Leakage Current	I_R	$V_R = 7V$	-	-	0.5	μA
Forward Voltage	V_F	$I_F = 10mA$	-	0.8	1.0	V
Capacitance	C_j	$V_R = 0V, f = 1MHz$	-	70	85	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

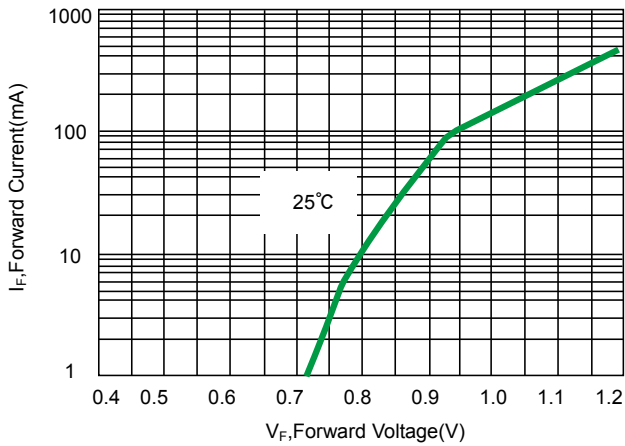


Fig 1. Typical Forward Voltage

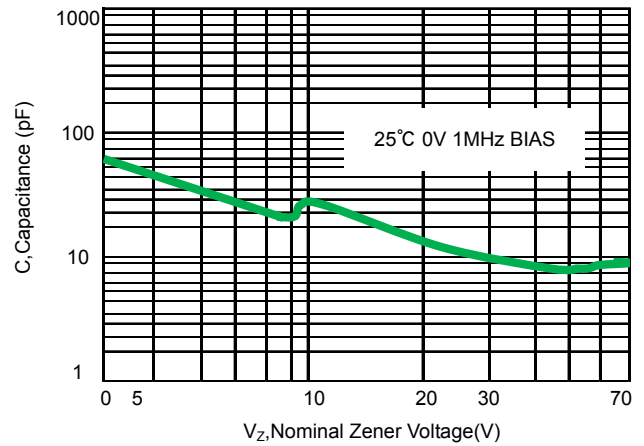


Fig 2. Typical Capacitance

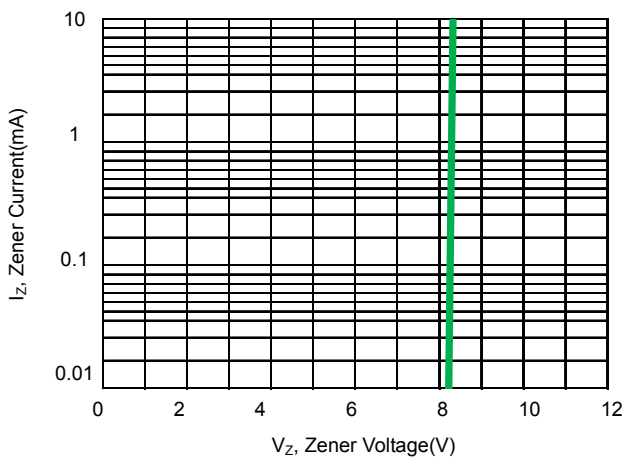


Fig 3. Zener Voltage versus Zener Current

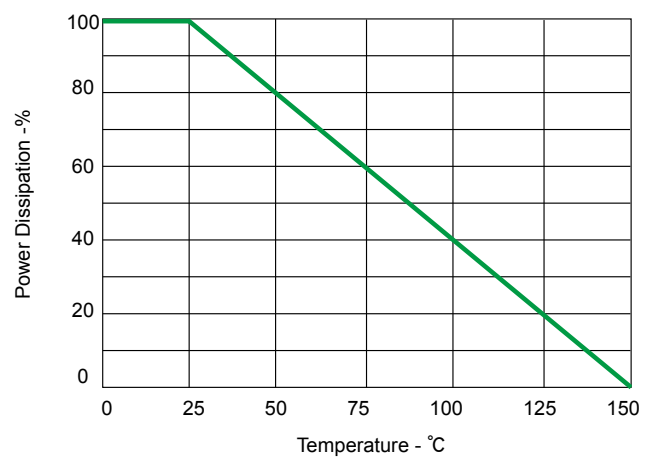
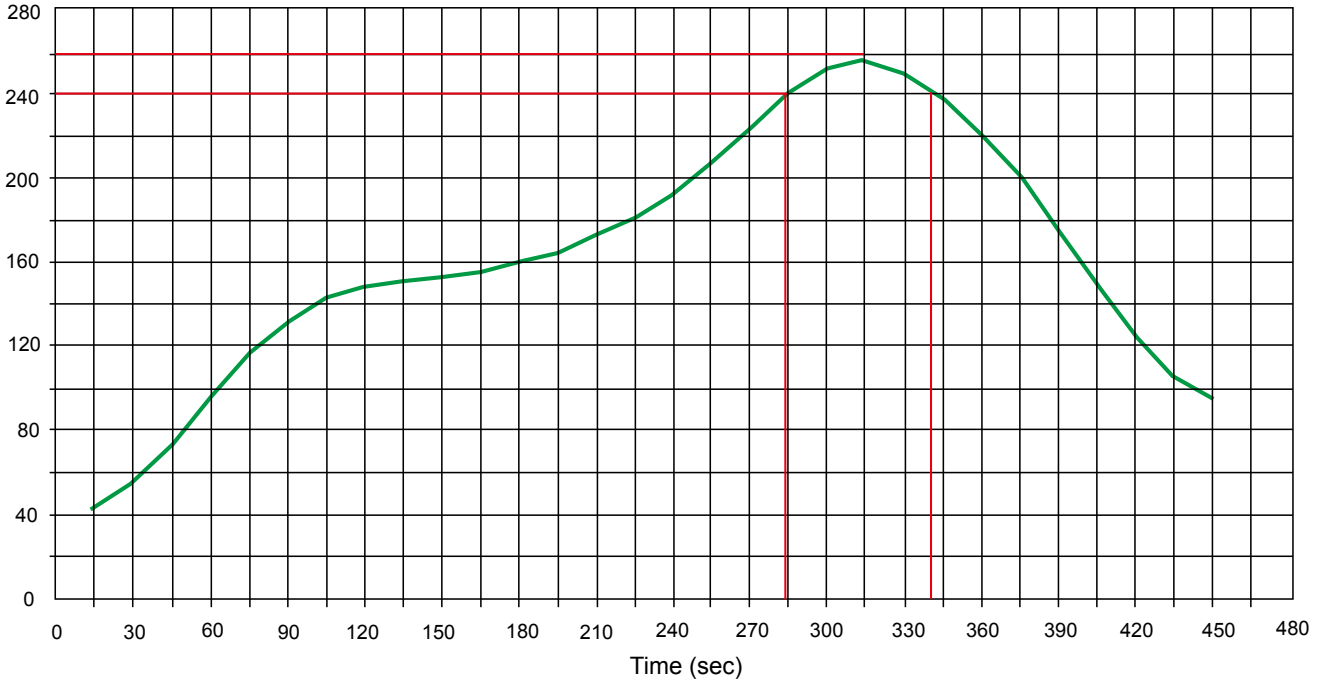


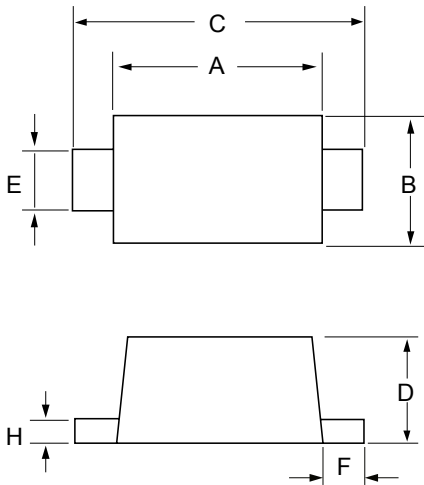
Fig 4. Steady State Power Detating

Solder Reflow Recommendation

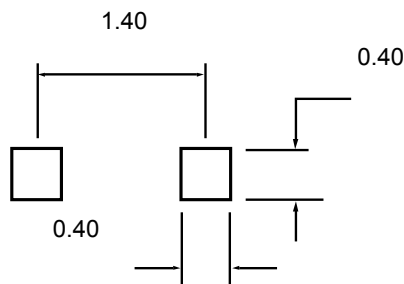
Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



Product dimension (SOD-523)



Dim	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.043	0.051	1.10	1.30
B	0.028	0.035	0.70	0.90
C	0.059	0.067	1.50	1.70
D	0.020	0.028	0.50	0.70
E	0.010	0.014	0.25	0.35
F	0.006	0.010	0.15	0.25
H	0.0028	0.0079	0.07	0.20




Unit:mm

Ordering information

Device	Package	Shipping
PZ5D8V2H	SOD-523 (Pb-Free)	3000 / Tape & Reel


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