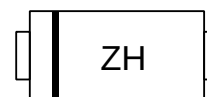


Zener Voltage Regulators

Description

The PZ5D4V2H 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

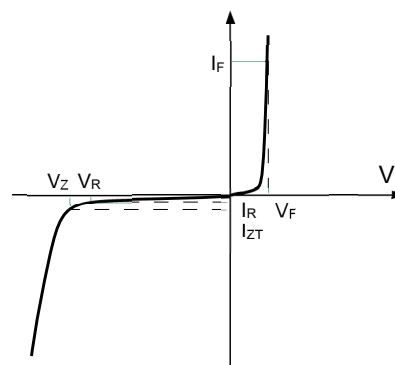
- Standard zener breakdown voltage range 5.1V
- SOD-523 package
- Steady state power rating of 500mW
- ESD rating of class 3(>16kV)per human body model
- RoHS compliant transient

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



Electrical characteristics per line@ (unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Zener Voltage	V_Z	$I_{ZT} = 5\text{mA}$	4.8	5.1	5.5	V
Maximum Zener Impedance	Z_{ZT}	$I_{ZT} = 5\text{mA}$	-	-	55	Ω
Maximum Zener Impedance	Z_{ZK}	$I_{ZK} = 0.5\text{mA}$	-	-	500	Ω
Reverse Leakage Current	I_R	$V_R = 4.2\text{V}$	-	-	20	μA
Forward Voltage	V_F	$I_F = 100\text{mA}$	-	-	1.25	V
Max.Capacitance	C	$V_R = 4\text{V}, f = 1\text{MHz}$	-	-	300	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	$R_{\theta JA}$	340	°C/W
Storage Temperature	T_J, T_{STG}	-65 to +150	°C

Typical Characteristics

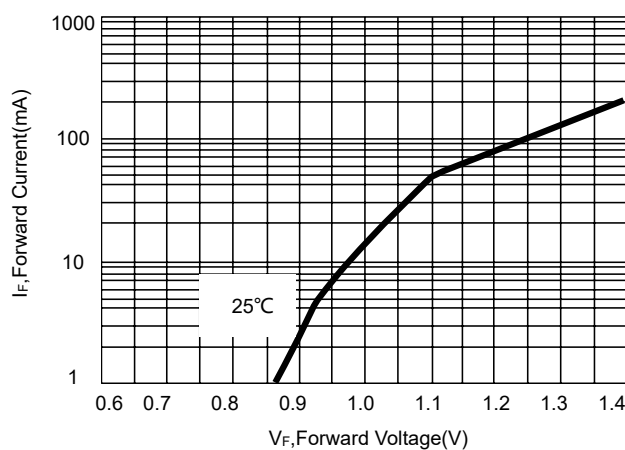


Fig 1. Typical Forward Voltage

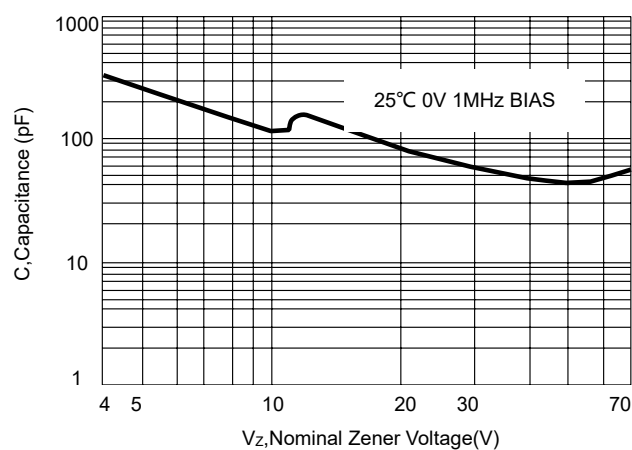


Fig 2. Typical Capacitance

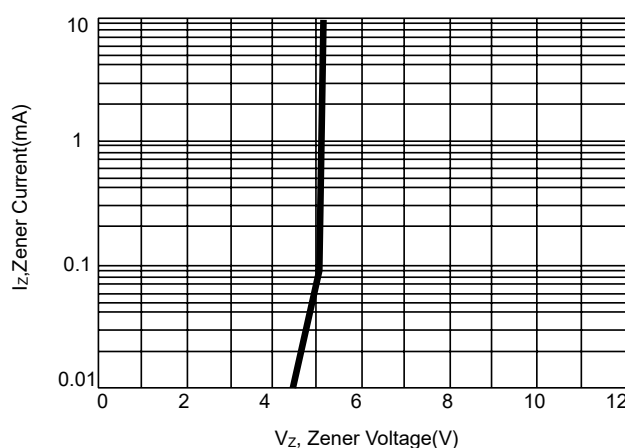


Fig 3. Zener Voltage versus Zener Current

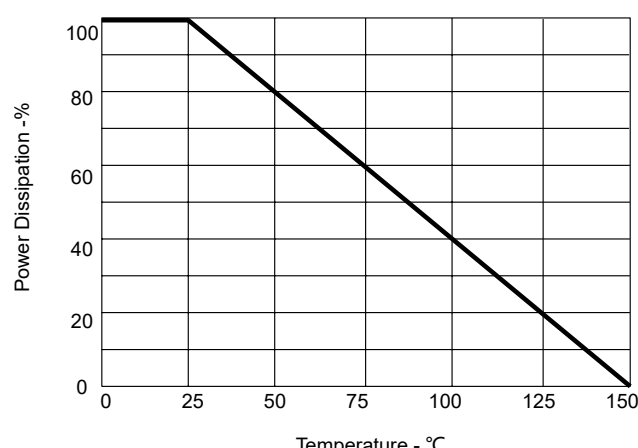
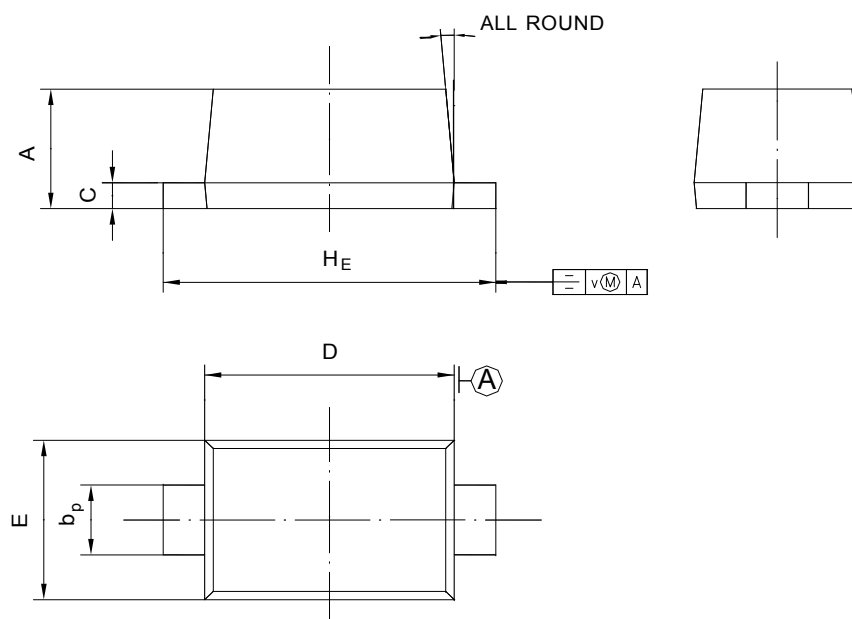


Fig 4. Steady State Power Detating

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



UNIT	A	b _p	C	D	E	H _E	V	∠
mm	0.68 0.58	0.4 0.3	0.135 0.100	1.25 1.15	0.85 0.75	1.7 1.5	0.1	5°