

Zener Voltage Regulators

Description

The PZ5D15VH is packaged in a SOD-523 surface mount package that has a power dissipation of 250mW. 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-523 package
- Steady state power rating of 250mW
- > 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)

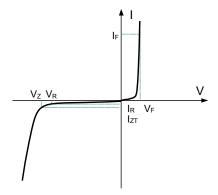
Mounting position: Any

➤ Qualified max reflow temperature:260 °C

Pure tin plating: 7 ~ 17 um

▶ Pin flatness:≤3mil

Electronics Parameter



Electrical characteristics per line@(unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Zener Voltage	Vz	I _{ZT} = 5mA	-	15	-	V
Maximum Zener Impedance	Z_{ZT}	I _{ZT} = 5mA	-	-	35	Ω
Maximum Zener Impedance	\mathbf{Z}_{ZK}	I _{ZK} =1mA	-	-	120	Ω
Reverse Leakage Current	I _R	V _R =12V	-	-	1	μA
Forward Voltage	V _F	I _F = 10mA	-	0.9	-	V
Capacitance	С	V _R =0V, f = 1MHz	-	-	150	pF

Absolute maximum rating@25℃

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P _D	250	mW
Storage Temperature	T _J ,T _{STG}	-65 to +150	$^{\circ}$

Typical Characteristics

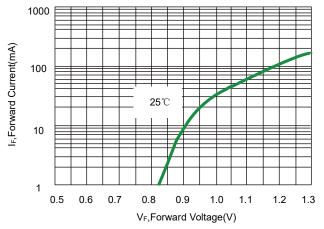


Fig 1.Typical Forward Voltage

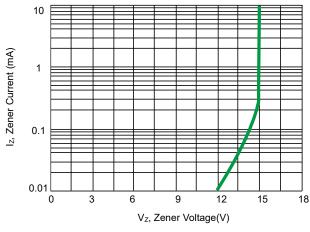


Fig 3.Zener Voltage versus Zener Current

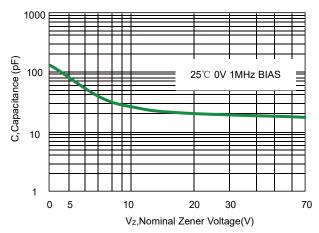


Fig 2. Typical Capacitance

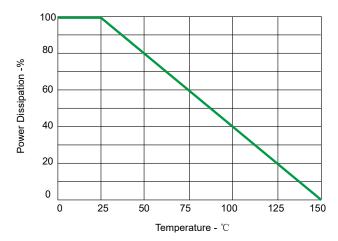
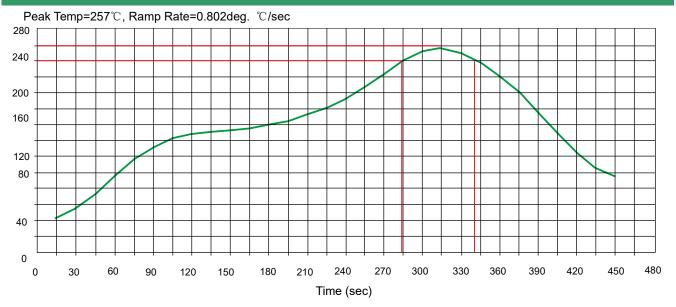
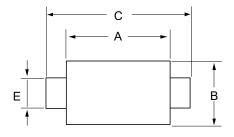


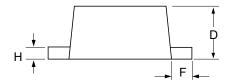
Fig 4.Steady State Power Detating

Solder Reflow Recommendation

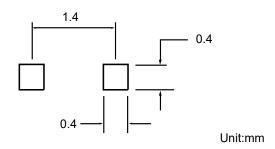


Product dimension (SOD-523)

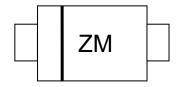




Dim	Inc	hes	Millimeters		
	MIN	MAX	MIN	MAX	
Α	0.043	0.051	1.10	1.30	
В	0.028	0.035	0.70	0.90	
С	0.059	0.067	1.50	1.70	
D	0.020	0.028	0.50	0.70	
E	0.010	0.014	0.25	0.35	
F	0.006	0.010	0.15	0.25	
Н	0.0028	0.0079	0.07	0.20	



Marking information



Ordering information

Device	Package	Reel	Shipping
PZ5D15VH	SOD-523 (Pb-Free)	7"	3000 / Tape & Reel

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