# Prisemi<sup>®</sup>

# PZ5D5V6H

## Zener Voltage Regulators

#### Description

The PZ5D5V6H 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 5.6V
- SOD-523 package
- Steady state power rating of 500mW
- ESD rating of class 3(>16kV)per human body model
- RoHS compliant transient

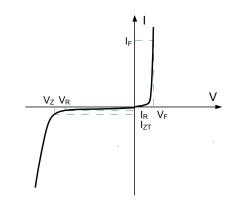
#### **Mechanical Characteristics**

- 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

#### Applications

- Cellular phones
- Hand held portables
- High density PC boards

#### **Electronics Parameter**



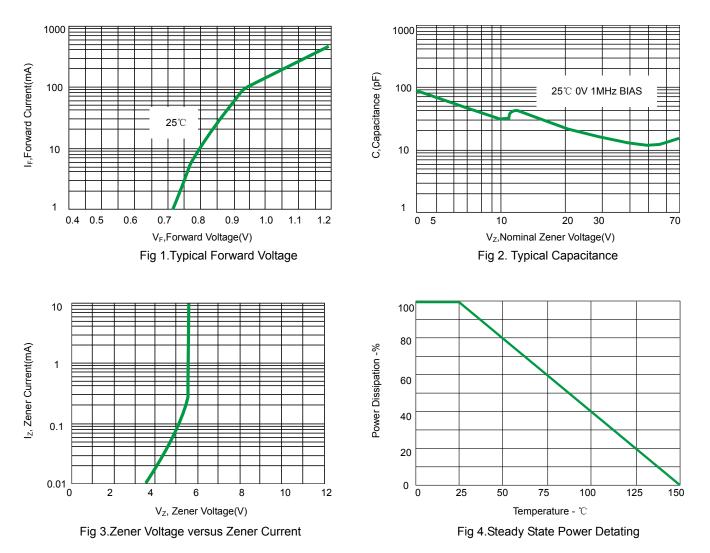
#### Electrical characteristics per line@( unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Zener Voltage	Vz	I <sub>ZT</sub> = 5mA	-	5.6	-	V
Maximum Zener Impedance	Z <sub>ZT</sub>	I <sub>ZT</sub> = 5mA	-	-	40	Ω
Maximum Zener Impedance	Z <sub>ZK</sub>	I <sub>ZK</sub> =0.5mA	-	-	500	Ω
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =2V	-	-	1	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 10mA	-	0.8	-	V
Capacitance	С	V <sub>R</sub> =0V, f = 1MHz	-	90	-	pF

#### Absolute maximum rating@25℃

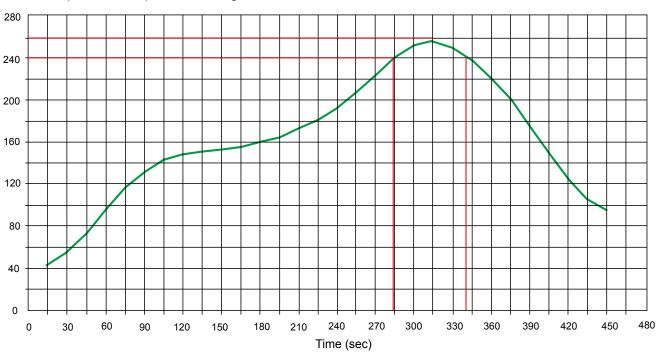
Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P <sub>D</sub>	500	mW
Thermal Resistance, Junction-to-Ambient	Roja	340	°C/W
Storage Temperature	T <sub>J</sub> ,T <sub>STG</sub>	-65 to +150	°C

#### **Typical Characteristics**



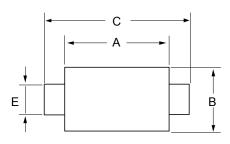
#### PZ5D5V6H

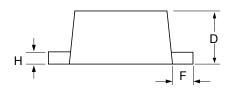
#### **Solder Reflow Recommendation**



# Peak Temp=257 $^\circ\!\!\mathbb{C}$ , Ramp Rate=0.802deg. $^\circ\!\!\mathbb{C}$ /sec

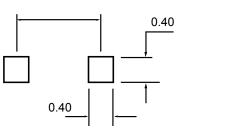
### Product dimension (SOD-523)





Dim	Inches		Millimeters		
	MIN	MAX	MIN	MAX	
А	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	
Е	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	

1.40



Unit:mm

#### PZ5D5V6H

# Ordering information

Device	Package	Shipping	
PZ5D5V6H	SOD-523 (Pb-Free)	3000 / Tape & Reel	

PZ5D5V6H

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