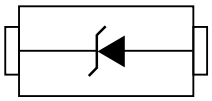
Description

The PZ3D12VU is packaged in a SOD-323 surface mount package that has a power dissipation of 200mW. 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 12V
- SOD-323 package
- Steady state power rating of 200mW
- ESD rating of class 3(>16kV)per human body model
- RoHS compliant transient

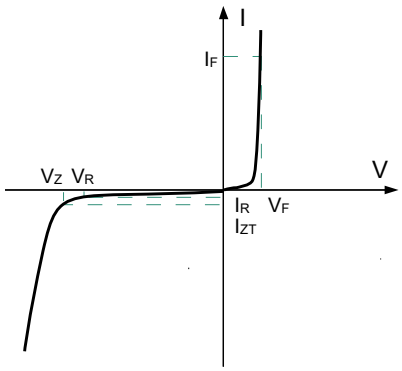
Applications

- 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℃
- 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	11.4	12	12.7	V
Maximum Zener Impedance	Z_{ZT}	I_{ZT} = 5mA	-	-	25	Ω
Maximum Zener Impedance	Z_{ZK}	I_{ZK} =1mA	-	-	150	Ω
Reverse Leakage Current	I_R	V_R =8V	-	-	0.1	μA
Forward Voltage	V_F	I_F = 10mA	-	0.8	-	V
Capacitance	C	V_R=0V, f = 1MHz	-	16	-	pF

Absolute maximum rating@25℃

Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P_D	200	mW
Storage Temperature	T_J,T_{STG}	-55 to +150	℃

Typical Characteristics

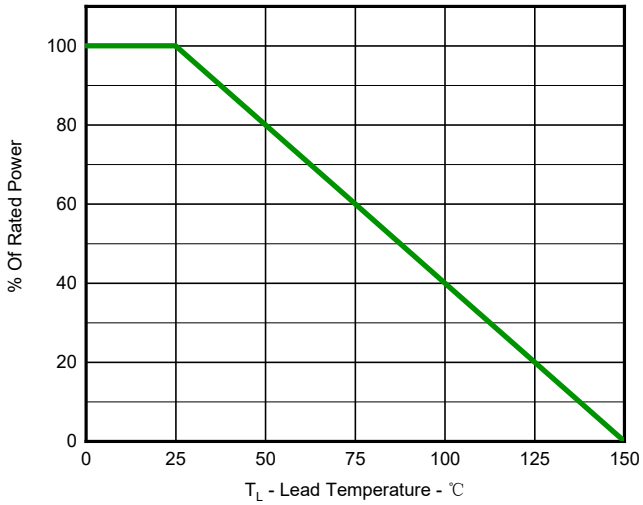


Fig 1.Power Derating Curve

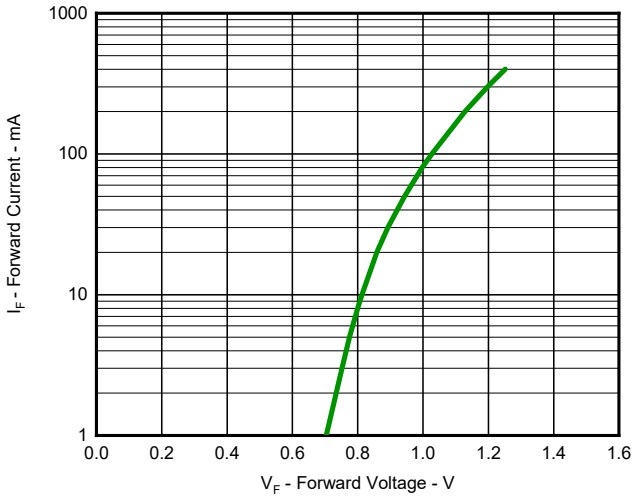


Fig 2.Typical Forward Voltage

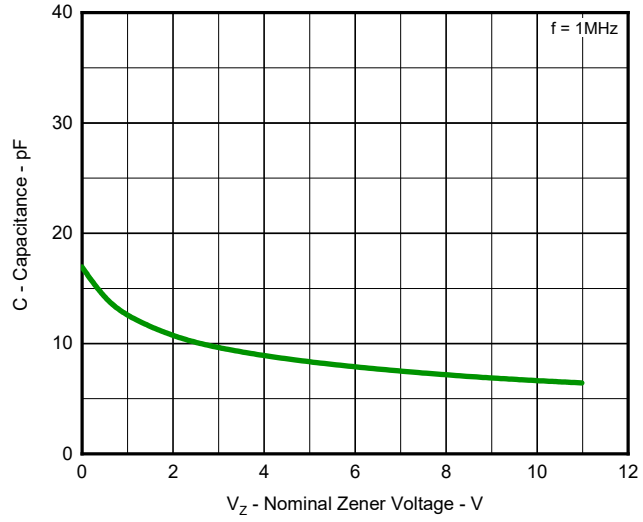


Fig 3. Typical Capacitance

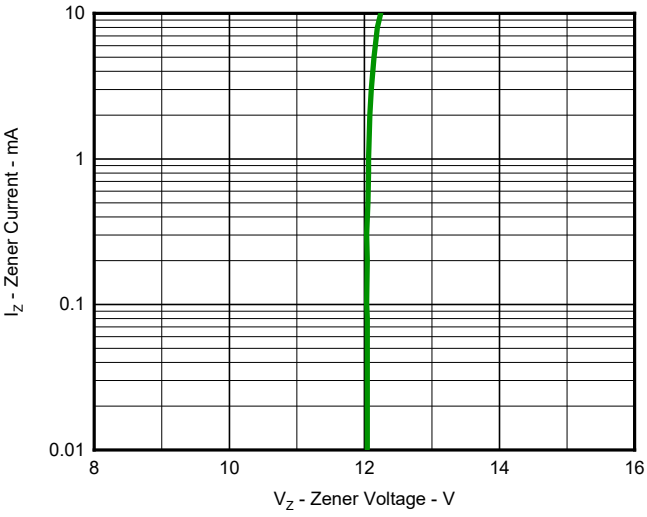
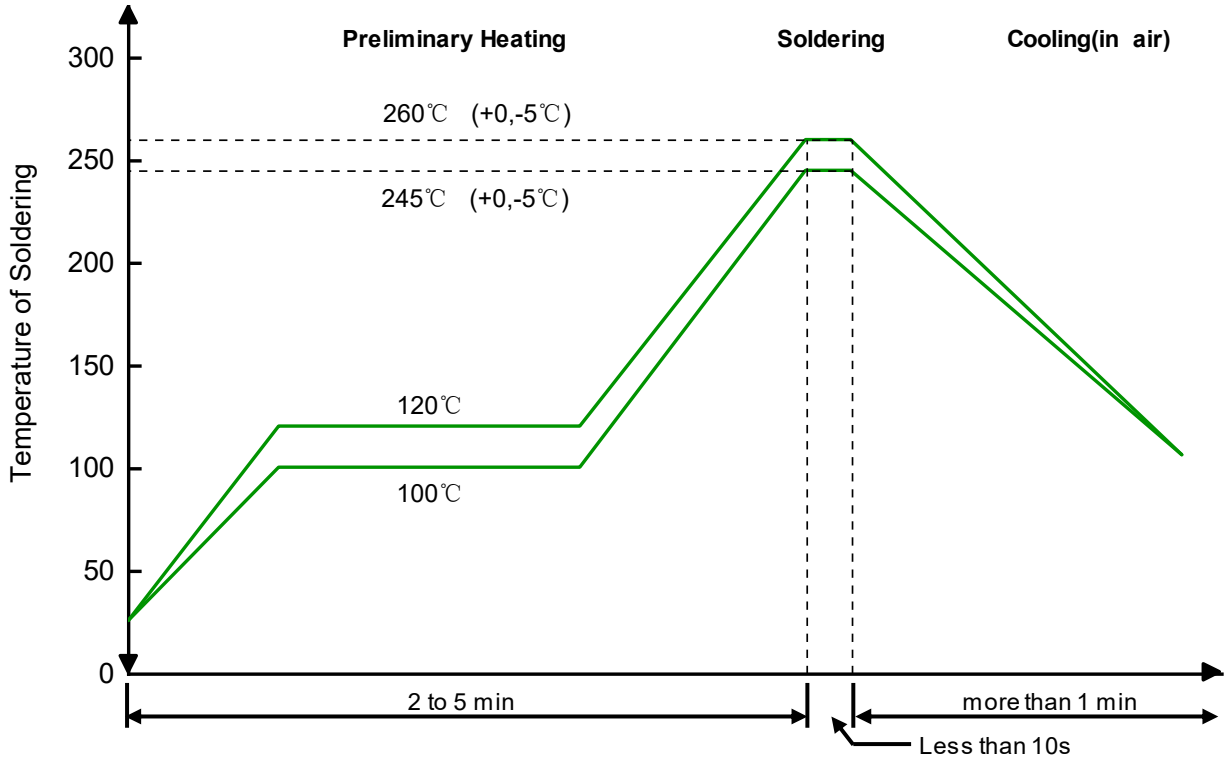


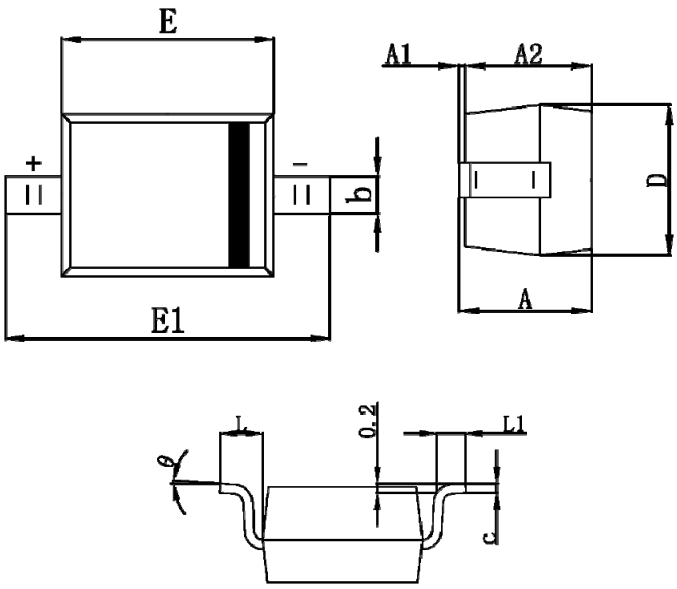
Fig 4.Zener Voltage versus Zener Current

Solder Reflow Recommendation

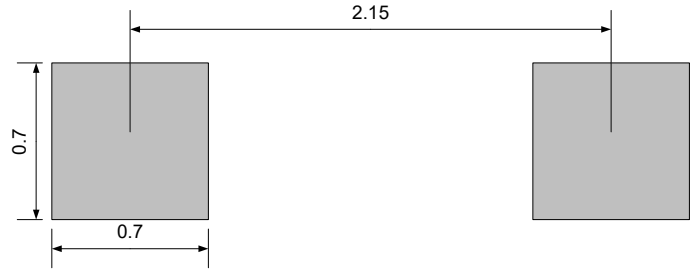


Remark: Pb free for 260℃； Pb for 245℃.

Product dimension (SOD-323)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	-	1.000	-	0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 Ref.		0.019 Ref.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



Suggested PCB Layout Unit:mm

Marking information

Ordering information

Device	Package	Reel	Shipping
PZ3D12VU	SOD-323 (Pb-Free)	7"	3000 / Tape & Reel

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