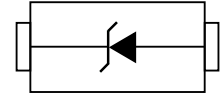## Description

The PZ3D6V8U 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 6.8V

➤ SOD-323 package

➤ Steady state power rating of 200mW

➤ ESD rating of class 3(>16kV)per human body model
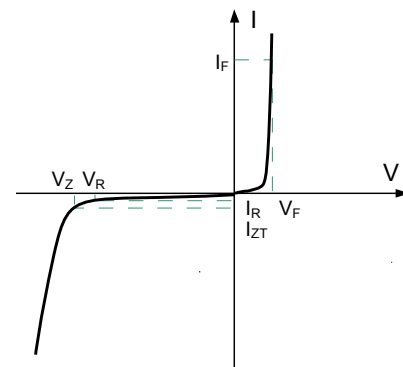
➤ RoHS compliant transient

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℃

➤ 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	-	6.8	-	V
Maximum Zener Impedance	Z_{ZT}	I_{ZT} = 5mA	-	-	40	Ω
Maximum Zener Impedance	Z_{ZK}	I_{ZK} =1mA	-	-	160	Ω
Reverse Leakage Current	I_R	V_R =4V	-	-	2	μA
Forward Voltage	V_F	I_F = 10mA	-	0.8	-	V
Capacitance	C	V_R=0V, f = 1MHz	-	80	-	pF

Absolute maximum rating@25℃

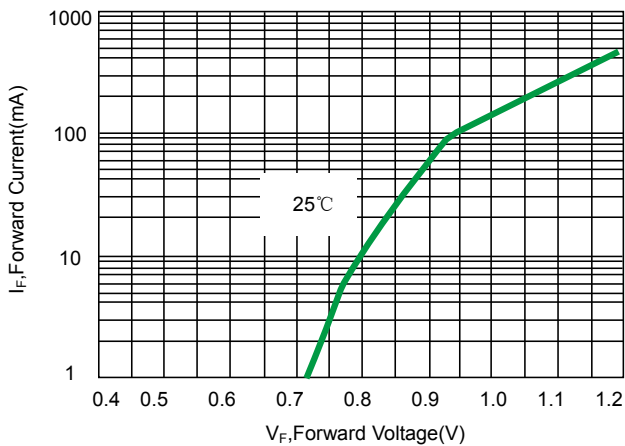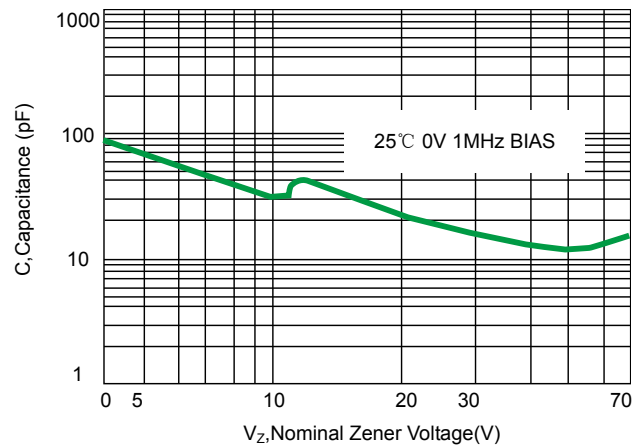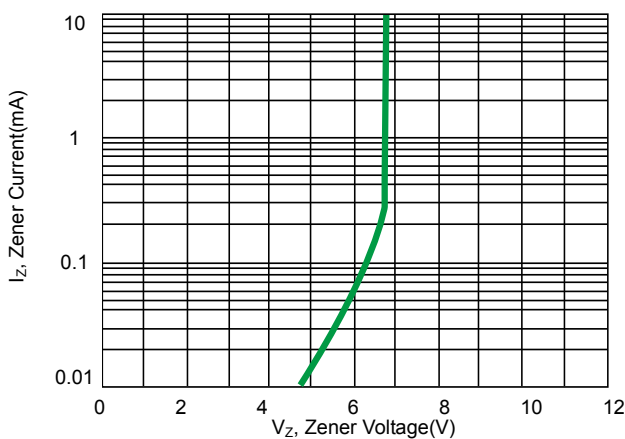| Rating	Symbol	Value	Units
Total Device Dissipation FR-5 Board	P_D	200	mW
Thermal Resistance,Juction-to-Ambient	$R_{\Theta JA}$	635	℃/W
Storage Temperature	T_J, T_{STG}	-65 to +150	℃

Typical Characteristics

Fig 1.Typical Forward Voltage

Fig 2. Typical Capacitance

Fig 3.Zener Voltage versus Zener Current
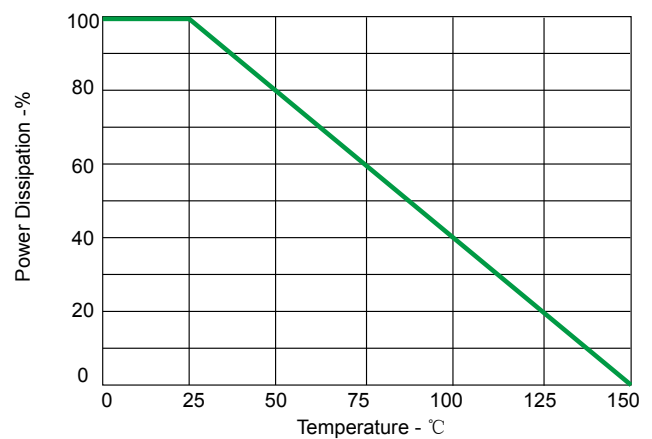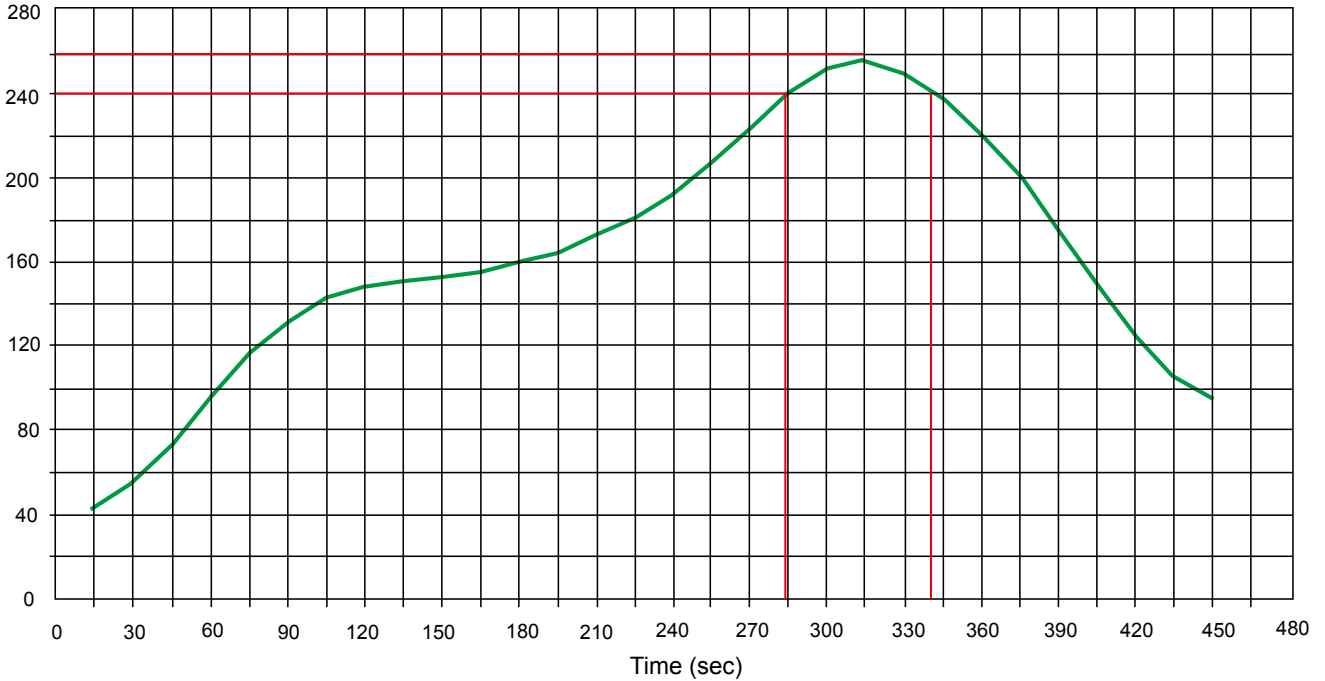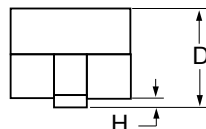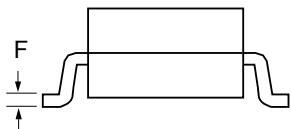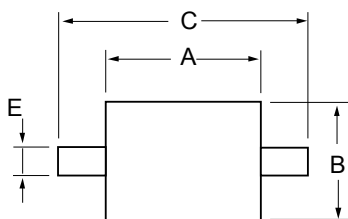

Fig 4.Steady State Power Detating

Solder Reflow Recommendation

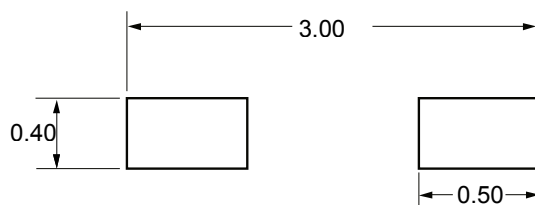Peak Temp=257℃, Ramp Rate=0.802deg. ℃/sec

Product dimension (SOD-323)

Dim	Inches		Millimeters	
	MIN	**MAX**	**MIN**	**MAX**
A	0.063	0.075	1.60	1.90
B	0.045	0.057	1.15	1.45
C	0.090	0.106	2.30	2.70
D	0.031	0.043	0.80	1.10
E	0.010	0.01	0.25	0.40
F	0.004	0.007	0.09	0.18
H	0.000	0.004	0.00	0.10

Unit:mm

Ordering information

Device	Package	Shipping
PZ3D6V8U	SOD-323 (Pb-Free)	3000 / Tape & Reel

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