



STZ23C5V6WS

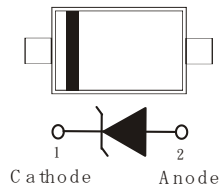
SURFACE MOUNT ZENER DIODES

FEATURES

- Planar die construction
- 150mW Power dissipation
- Ideally suited for automated assembly processes
- Ultra Thin Profile Package for Space Constrained Utilization
- Package suitable for Automated Handling
- Exceed ESD standard based on IEC-61000-4-2 Contact : 8kV, Air : 15kV
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

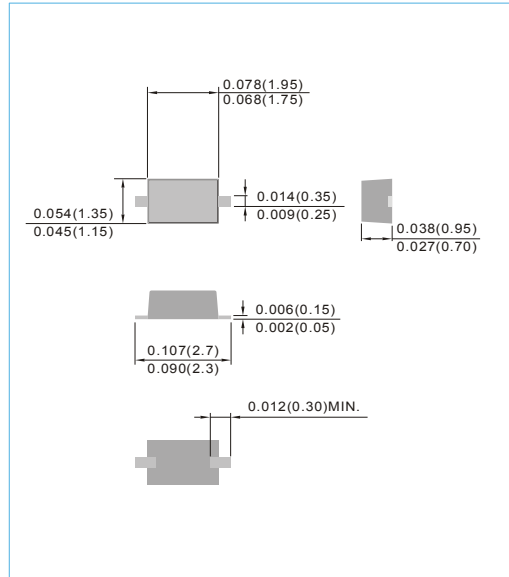
MECHANICAL DATA

- Case: SOD-323, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See circuit schematic below
- Approx. Weight: 0.00014 ounce, 0.0041 gram
- Mounting Position: Any
- Marking : UD



SOD-323

Unit : inch(mm)



ABSOLUTE MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Power Dissipation	P _D	150	mW
Typical Thermal Resistance, Junction to Ambient (Note1)	R _{θJA}	700	°C/W
Operating Junction Temperature and Storage Temperature Range	T _J ,T _{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	CONDITION	VALUE			UNIT
			Nom.	Min.	Max.	
Zener Voltage	V _Z	I _Z =5mA				V
			5.6	5.31	5.92	V
Maximum DC Reverse Current	I _R	V _R =2.5V	1.0			μA
Dynamic Impedance	Z _{ZT}	I _Z =5mA	15			Ω
Rising Operation Resistance	Z _{ZK}	I _Z =0.5mA	60			Ω
Typical Capacitance Junction	C _J	f=1MHz V _R =5V	17			pF

NOTES:

1. Mounted on an FR4 PCB, single-sided copper, mini pad.



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RATING AND CHARACTERISTIC CURVES

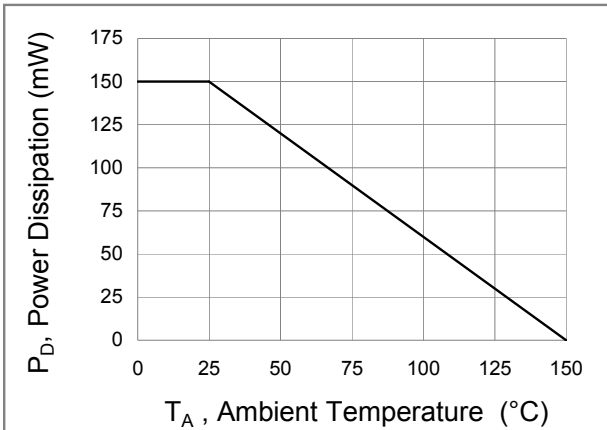


Fig.1 Steady-State Power Derating Curve

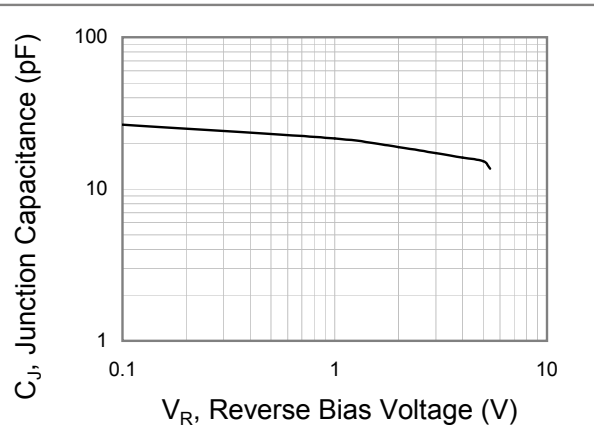


Fig.2 Typical Junction Capacitance

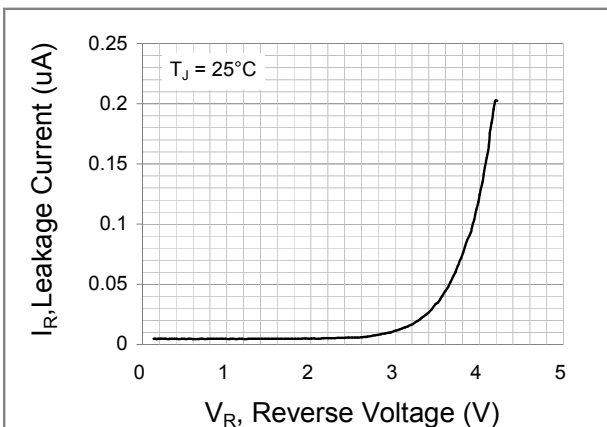


Fig.3 Typical Leakage Characteristics

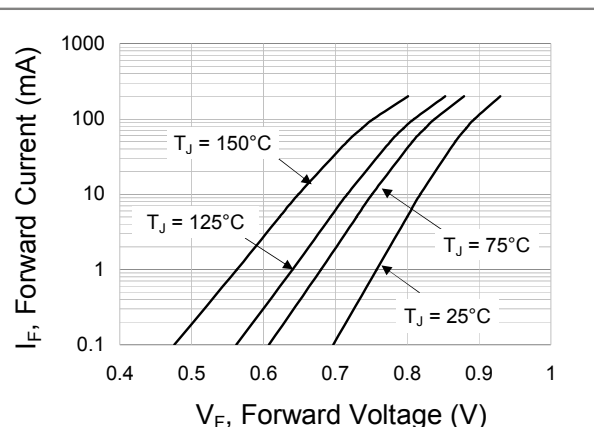


Fig.4 Typical Forward Characteristics

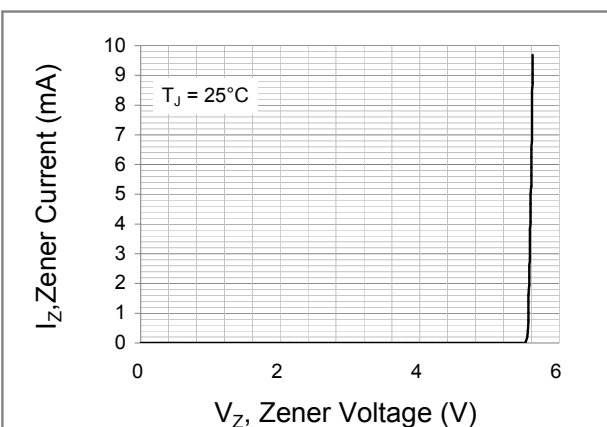


Fig.5 Typical Zener Characteristics

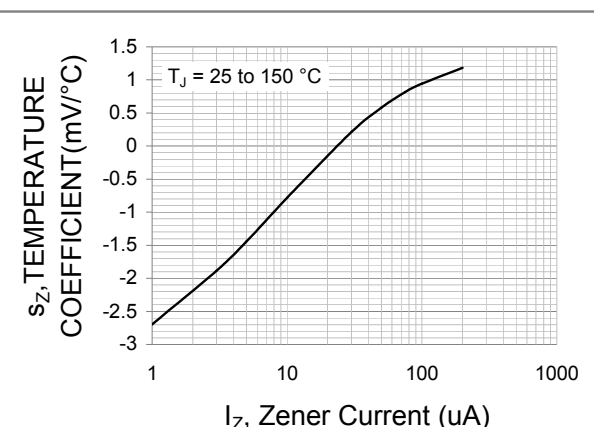


Fig.6 Temperature coefficient as a function of working current; typical



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RATING AND CHARACTERISTIC CURVES

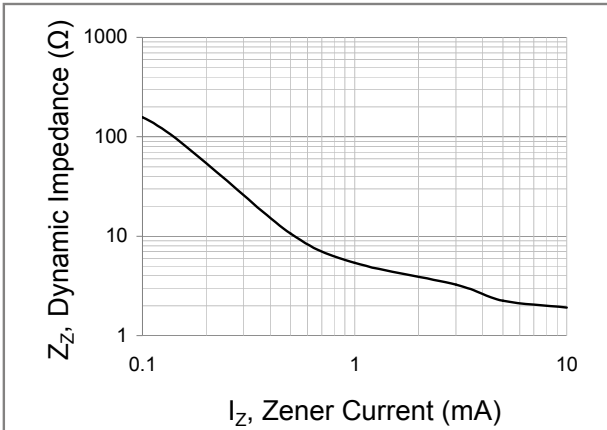
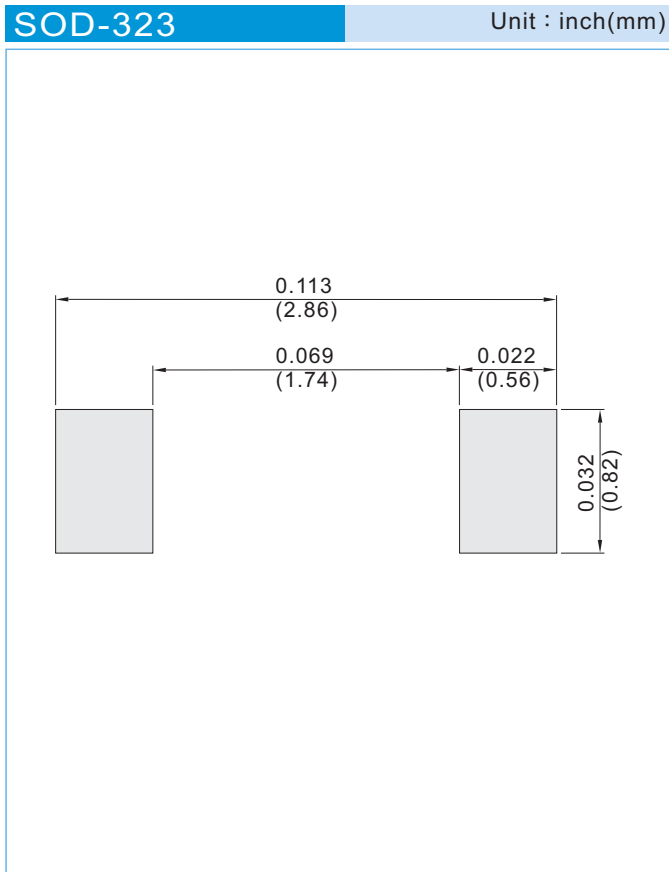


Fig.7 Typical Zener Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 12K per 13" plastic Reel
T/R - 5K per 7" plastic Reel



STZ23C5V6WS

Part No_packing code_Version

STZ23C5V6WS_R1_00001

STZ23C5V6WS_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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