



# STZ23C5V6

## SURFACE MOUNT ZENER DIODES

### FEATURES

- Planar die construction
- 200mW Power dissipation
- Ideally suited for automated assembly processes
- Exceed ESD standard based on IEC-61000-4-2 Contact : 8kV, Air : 15kV
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounce, 0.0084 gram
- Marking: JD

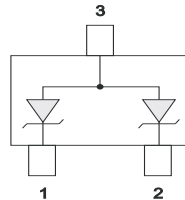
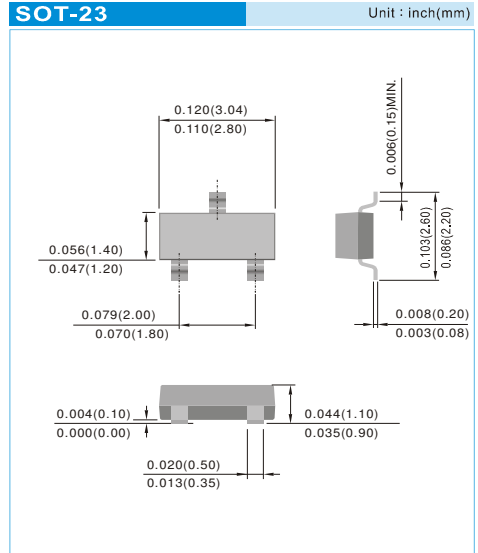


Fig.25



### MAXIMUM RATINGS

Parameter	Symbol	Value	Units
Maximum Power Dissipation at 25°C	P <sub>D</sub>	200	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Condition	Value		Unit
			Min.	Max.	
Zener Voltage	V <sub>Z</sub>	I <sub>Z</sub> =5mA			V
			5.31	5.92	V
Maximum DC Reverse Current T <sub>A</sub> =25°C	I <sub>R</sub>	V <sub>R</sub> =2.5V	1.0		μA
Dynamic Impedance	Z <sub>ZT</sub>	I <sub>Z</sub> =5mA	60		Ω
Rising Operation Resistance	Z <sub>ZK</sub>	I <sub>Z</sub> =0.5mA	200		Ω
Capacitance Junction	C <sub>J</sub>	f=1MHz V <sub>R</sub> =5V	17(Typ.)		pF

Note : Valid provided that leads ara distance of 8mm from case are kept at ambient temperature



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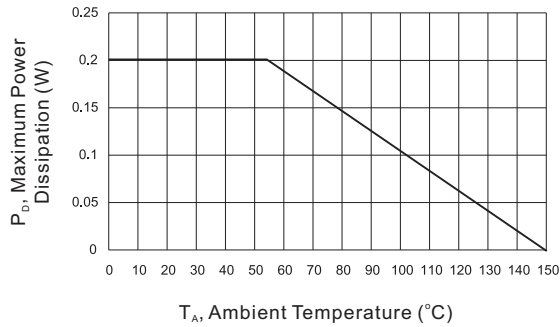


Fig. 1 Power Derating Curve

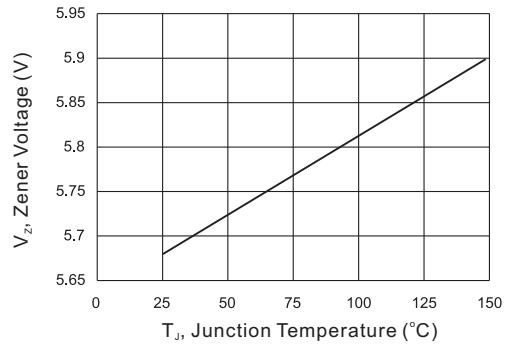


Fig. 2 Typical Zener Voltage Versus Junction Temperature

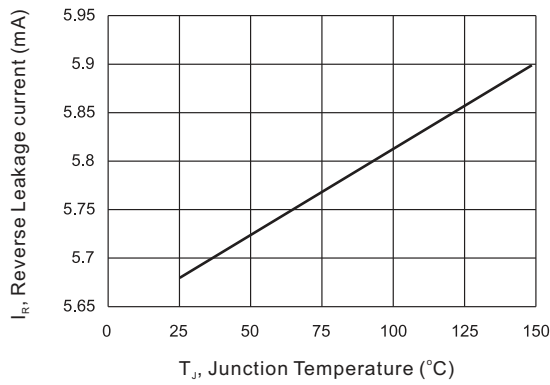


Fig. 3 Typical Leakage Current Versus Junction Temperature

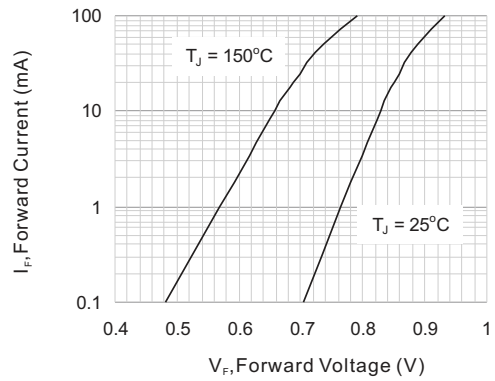


Fig. 4 Typical Forward Voltage

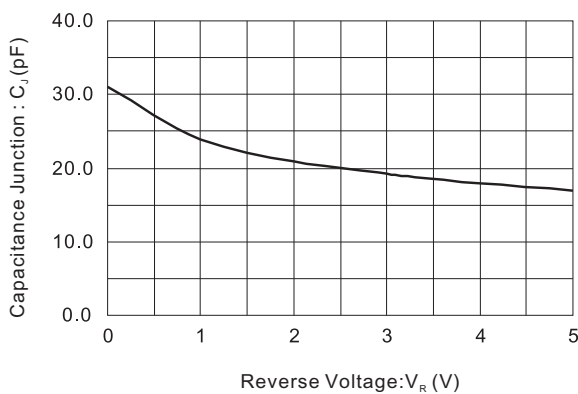


Fig. 5 Typical Capacitance

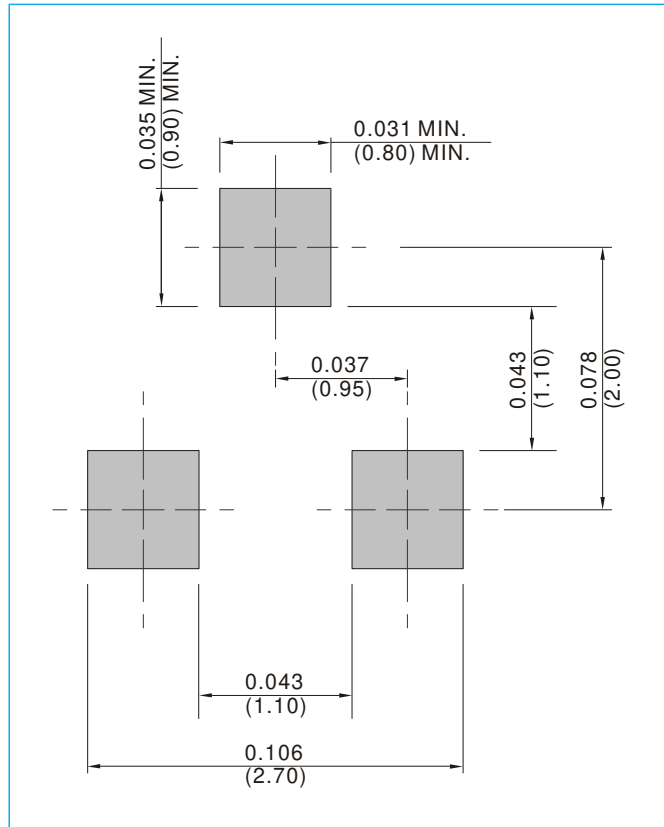


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## MOUNTING PAD LAYOUT

SOT-23

Unit : inch(mm)



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel



# STZ23C5V6

## Part No\_packing code\_Version

STZ23C5V6\_R1\_00001

STZ23C5V6\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



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



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