



# AZ23C5V6P

## SURFACE MOUNT ZENER DIODES

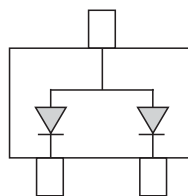
### FEATURES

- Planar die construction
- 200mW Power dissipation
- Ideally suited for automated assembly processes
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

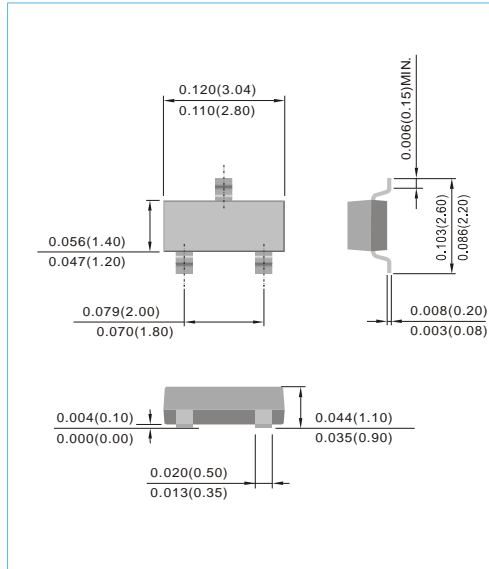
- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounces, 0.0084 grams
- Marking: ID

COMMON ANODE



### SOT-23

Unit : inch(mm)



### 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

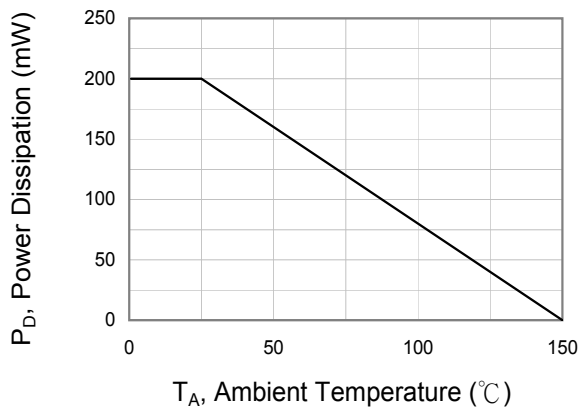
Parameter	Symbol	Condition	Value		Unit
			Min.	Max.	V
Zener Voltage	V <sub>Z</sub>	I <sub>Z</sub> =5mA	5.31	5.92	V
Maximum DC Reverse Current T <sub>A</sub> =25°C	I <sub>R</sub>	V <sub>R</sub> =2.5V	1		μA
Dynamic Impedance	Z <sub>Z</sub>	I <sub>Z</sub> =5mA	60		Ω
Rising Operation Resistance	Z <sub>ZK</sub>	I <sub>Z</sub> =0.5mA	200		Ω
Capacitance Between Terminals	C <sub>T</sub>	f=1MHz V <sub>R</sub> =5V	TYP. 12		pF

Note : Valid provided that leads ara distance of 8mm from case are keptatam bienttem perature

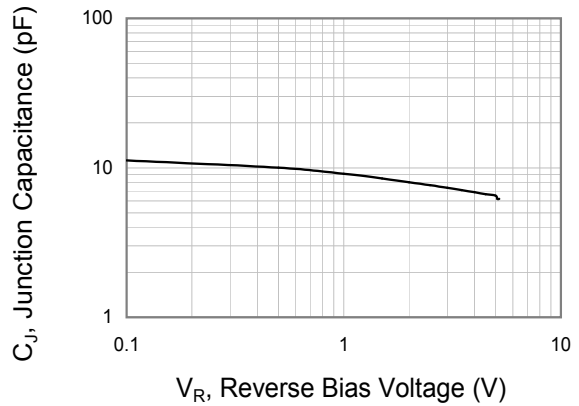


# AZ23C5V6P

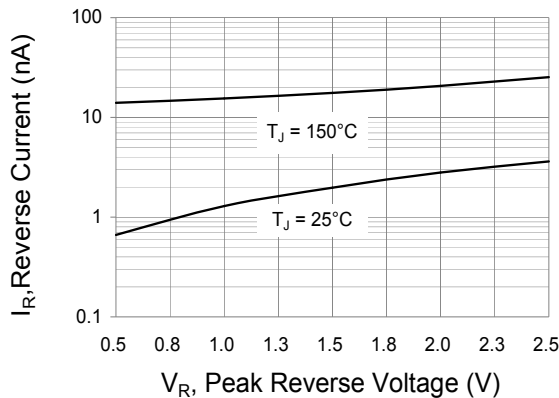
## RATING AND CHARACTERISTIC CURVES



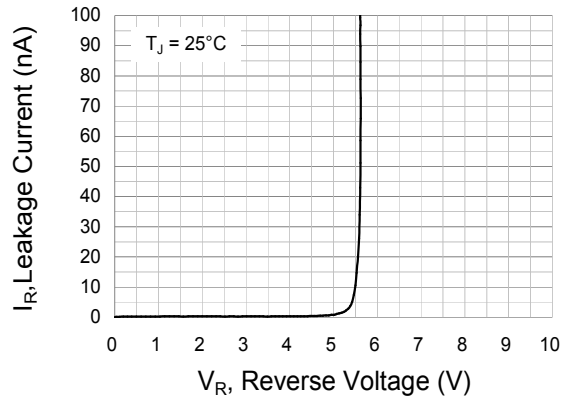
**Fig.1 Power Derating Curve**



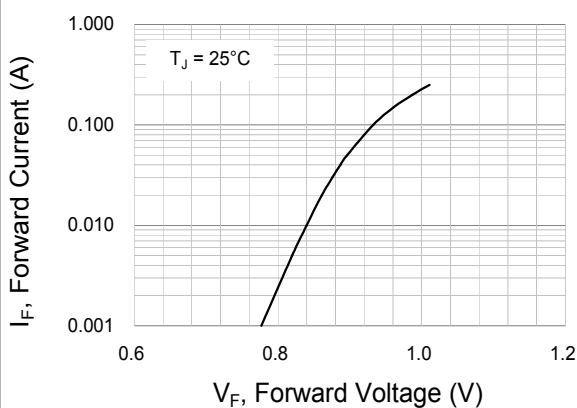
**Fig.2 Typical Junction Capacitance**



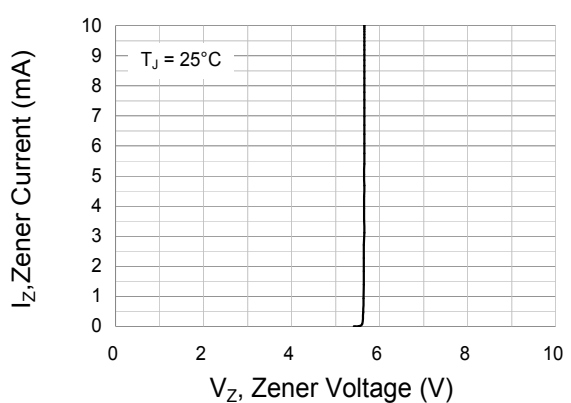
**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Leakage Characteristics**



**Fig.5 Typical Forward Characteristics**

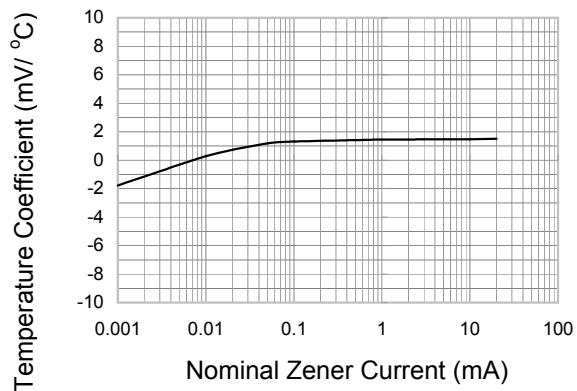


**Fig.6 Typical Zener Characteristics**



# AZ23C5V6P

## RATING AND CHARACTERISTIC CURVES



**Fig.7 Temperature Coefficient as a Function of Working Current**

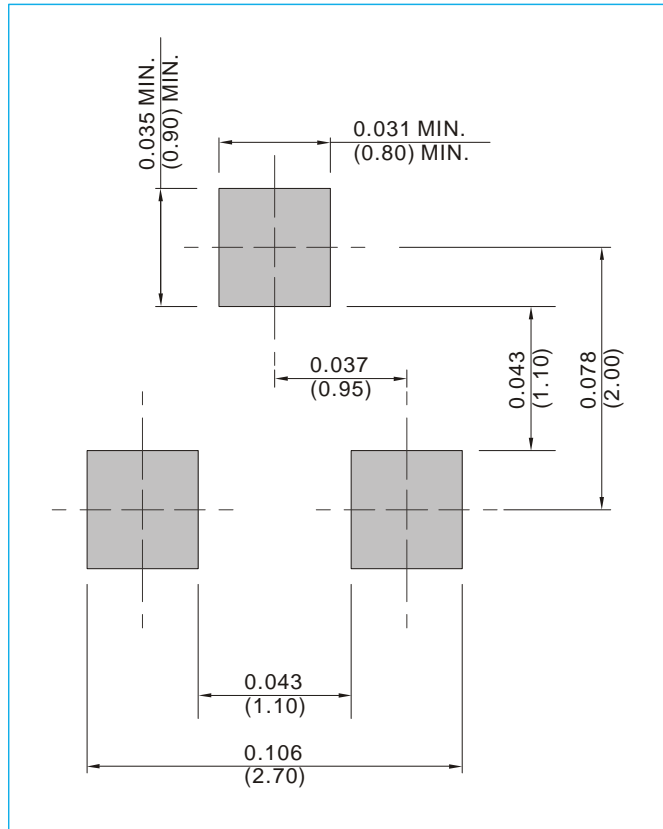


# AZ23C5V6P

## 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



# AZ23C5V6P

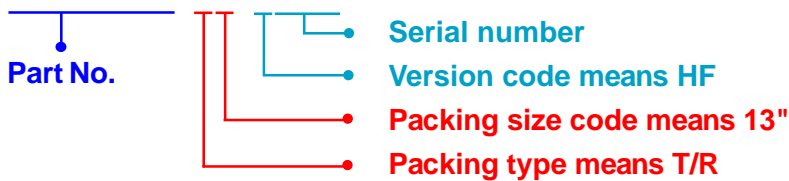
## Part No\_packing code\_Version

AZ23C5V6P\_R1\_00001

AZ23C5V6P\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXXX</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>			



## AZ23C5V6P

---

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.