

# Low $I_{ZT}$ Zener Diodes

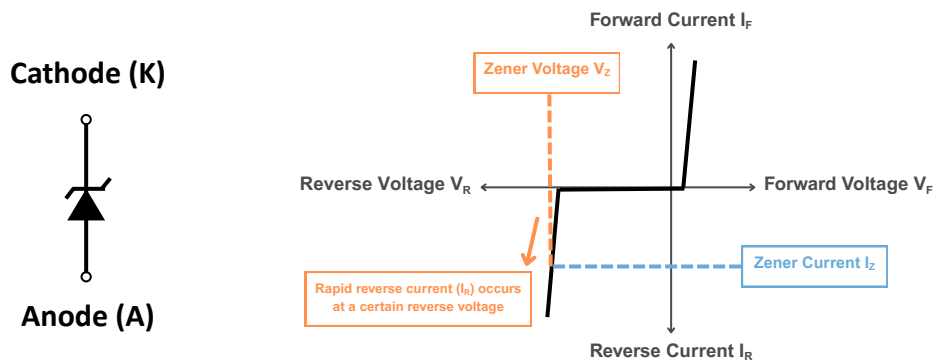
## Smart Solutions for Precision Voltage Regulation




Engineered with ultra-low  $I_{ZT}$  characteristics, the latest generation of Zener diodes delivers precise voltage regulation with minimal power consumption. These diodes are ideal for low-bias, battery-powered, and compact system designs across automotive, industrial, and portable electronics sectors.

### ► Key Features

- AEC-Q101 qualified
- Ultra-low  $I_{ZT}$  for energy-efficient operation
- Stable voltage regulation across wide current range
- Low leakage current enhances accuracy and reliability
- Compact packages: SOD-123/FL/HE, SOD-323HE, SOD-523, etc.



Part Number	Package	$P_D$	$V_Z @ I_{ZT}$	$V_Z @ I_{ZT}$	$V_Z @ I_{ZT}$	$I_{ZT}$	$P_D$	
		W	V	V	V		mW	%
 PZA1AL5V6B	SOD-123FL	1	5.6	5.32	5.88	20	112	100%
1N4734A	DO-41	1	5.6	5.3	5.9	45	252	225%
1SMA4734	SMA	1	5.6	5.3	5.9	45	252	225%
PZ1AFC5V6B	SMAF-C	1	5.6	5.32	5.88	100	560	500%
PZ1AH5V6B	SOD-123HE	1	5.6	5.32	5.88	100	560	500%
PZ1AL5V6B	SOD-123FL	1	5.6	5.32	5.88	100	560	500%






## ➤ Target Applications

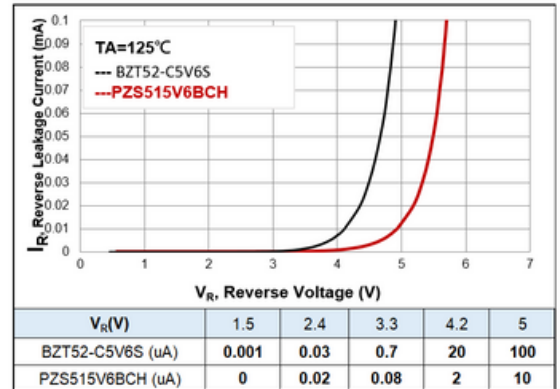
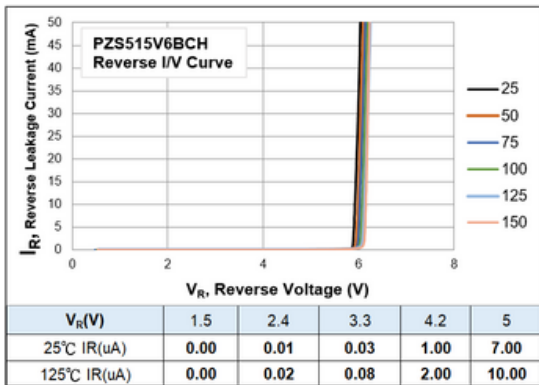
- Industrial devices
- Automotive systems
- Portable electronics
- Mobile and wearable devices
- Battery charging systems
- Low-current general regulation
- Protection for MOSFET / BJT switch circuits

## ➤ Recommended Small Signal ZENER(<1W)





Ideal for low-bias and battery-powered portable applications

P <sub>D</sub> (mW)	V <sub>Z</sub> (%)	V <sub>Z</sub> @ I <sub>ZT</sub> (V)	I <sub>ZT</sub> (mA)	SOD-523	SOD-323HE	SOD-123
						
150	5	3.9~43	50	PZS11xxBES-AU		
500	5	3.9~43	50		PZS51xxBCH-AU	
500	5	3.9~43	50			PZS51xxBAS-AU

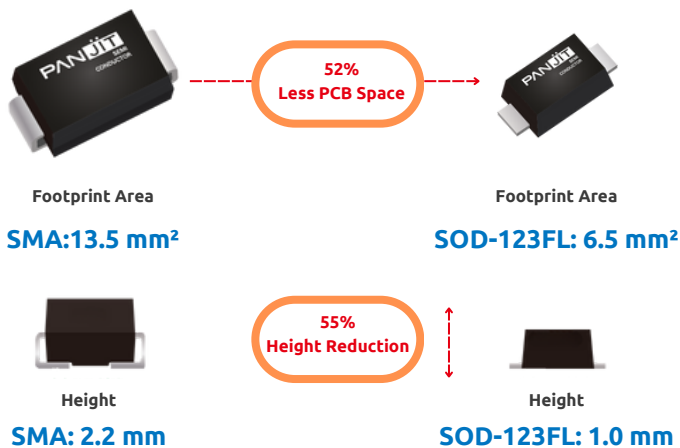
### Ultra-Low Zener Diodes Current Test



## ➤ Recommended Power ZENER(>1W)

P <sub>D</sub> (mW)	V <sub>Z</sub> (%)	V <sub>Z</sub> @ I <sub>ZT</sub> (V)	I <sub>ZT</sub> (mA)	SOD-323HE	SOD-123HE	SOD-123FL	SMAF-C
							
1000	5	5.6-43	5-20			PZA1ALxxB-AU	
1000	2	5.6-43	5-20	PZAH1CHxxA-AU	PZAH1AHxxA-AU	PZAH1ALxxA-AU	PZAH1AFCxxA-AU

### Compact Package Upgrade



### Low Leakage Before Breakdown for Enhanced Accuracy

