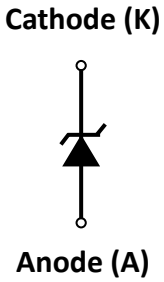
Low IZT Zener Diodes

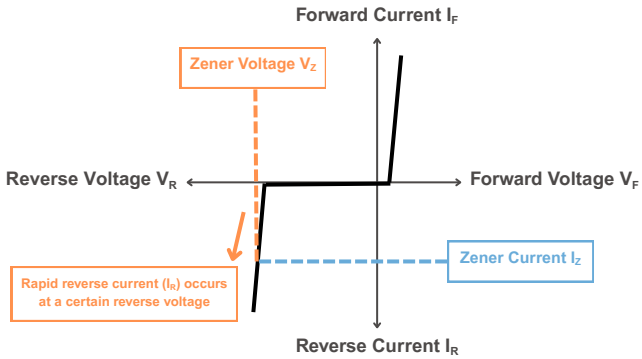
Smart Solutions for Precision Voltage Regulation

Engineered with ultra-low IZT 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 IZT 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} (Nom.)	V_Z @ I_{ZT} (Min.)	V_Z @ I_{ZT} (Max.)	I_{ZT}	P_D	
		W	V	V	V	mA	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

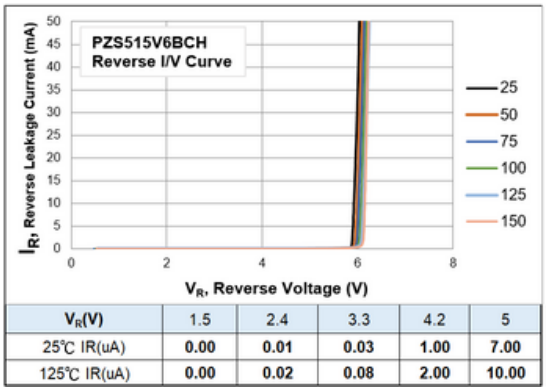
- Industrial devices
- Automotive systems
- Portable electronics
- Mobile and wearable devices
- Battery charging systems
- Low-current general regulation
- Protection for MOSFET / BJT switch circuits

Recommended Small Signal ZENER(<1W)

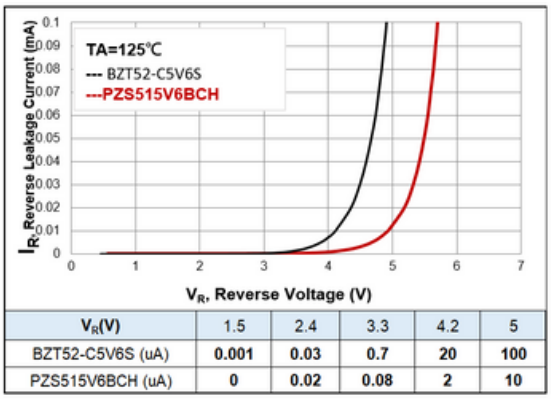
Ideal for low-bias and battery-powered portable applications

P_D (mW)	V_Z (%)	V_Z @ I_{ZT} (V)	I_{ZT} (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



V_R(V)	1.5	2.4	3.3	4.2	5
25℃ IR(uA)	0.00	0.01	0.03	1.00	7.00
125℃ IR(uA)	0.00	0.02	0.08	2.00	10.00

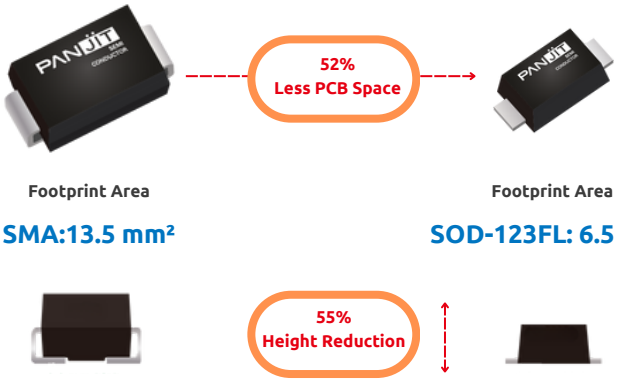


V_R(V)	1.5	2.4	3.3	4.2	5
BZT52-C5V6S (uA)	0.001	0.03	0.7	20	100
PZS515V6BCH (uA)	0	0.02	0.08	2	10

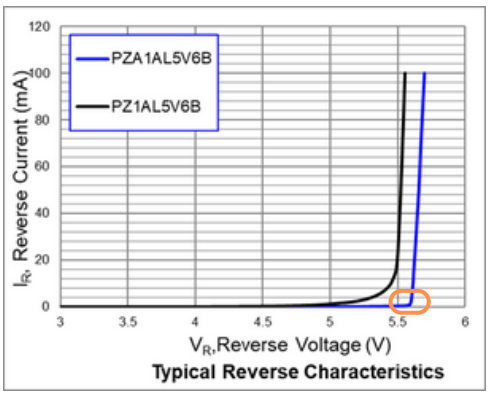
Recommended Power ZENER(>1W)

P_D (mW)	V_Z (%)	V_Z @ I_{ZT} (V)	I_{ZT} (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



PANJIT International Inc. **Headquarters** No.24, Gangshan N. Rd., Gangshan Dist., Kaohsiung City 82063, Taiwan
TEL +886-7-621-3121 **FAX** +886-7-621-3129 **MAIL** sales@panjit.com.tw