

PZ1AH3V6B-AU~PZ1AH75B-AU

SILICON ZENER DIODE

VOLTAGE

3.6V~75V

POWER

1Watt

Features

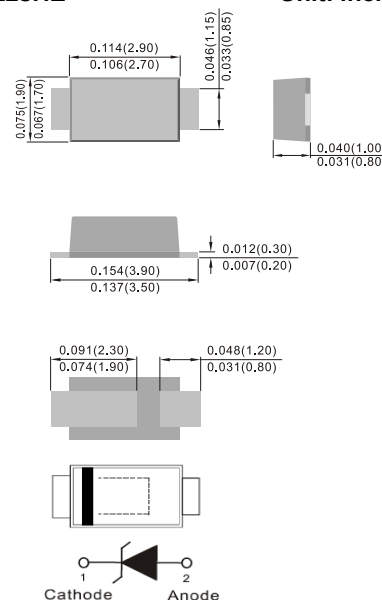
- Silicon planar Zener diode
- Low profile surface-mount package
- Low leakage current
- Excellent stability
- AEC-Q101 qualified
- High temperature soldering : 260 °C/10 seconds at terminals
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: SOD-123HE, plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.0006 ounces, 0.0184 grams

SOD-123HE

Unit: inch(mm)



Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation at $T_A=25^{\circ}\text{C}$ (Notes 1)	P_D	1	W
ESD Voltage per IEC61000-4-2 (Air)	V_{ESD}	± 30	kV
ESD Voltage per IEC61000-4-2 (Contact)		± 30	
Typical Thermal Resistance (Notes 2)	$R_{\theta JA}$	185	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_J	-55 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

NOTES :

1. Mounted on a 5mm^2 copper pads to each terminal.
2. Mounted on a FR-4 PCB, single-sided copper, mini pad .



PZ1AH3V6B-AU~PZ1AH75B-AU

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Part Number	Nominal Zener Voltage				Nominal Zener Impedance				Max. Reverse Leakage Current		Marking Code
	V _Z @I _{ZT}				Z _{ZT} @I _{ZT}		Z _{ZK} @I _{ZK}		I _R @V _R		
	Nom. V	Min. V	Max. V	mA	Ω	mA	Ω	mA	μA	V	
PZ1AH3V6B-AU	3.6	3.42	3.78	100	8	100	400	1	100	1	ACH
PZ1AH3V9B-AU	3.9	3.71	4.10	100	8	100	400	1	50	1	BCH
PZ1AH4V3B-AU	4.3	4.09	4.52	100	7	100	400	1	25	1	CCH
PZ1AH4V7B-AU	4.7	4.47	4.94	100	7	100	500	1	10	1	DCH
PZ1AH5V1B-AU	5.1	4.85	5.36	100	6	100	550	1	5	1	ECH
PZ1AH5V6B-AU	5.6	5.32	5.88	100	4	100	600	1	10	2	FCH
PZ1AH6V0B-AU	6	5.7	6.3	100	3	100	650	1	8	2	HCH
PZ1AH6V2B-AU	6.2	5.89	6.51	100	3	100	700	1	5	2	ICH
PZ1AH6V8B-AU	6.8	6.46	7.14	100	3	100	700	1	10	3	JCH
PZ1AH7V5B-AU	7.5	7.13	7.88	100	2	100	700	0.5	10	3	KCH
PZ1AH8V2B-AU	8.2	7.79	8.61	100	2	100	700	0.5	10	3	LCH
PZ1AH8V7B-AU	8.7	8.27	9.14	50	3	50	700	0.5	10	4	MCH
PZ1AH9V1B-AU	9.1	8.65	9.56	50	4	50	700	0.5	10	5	NCH
PZ1AH10B-AU	10	9.50	10.50	50	4	50	700	0.25	7	7.5	PCH
PZ1AH11B-AU	11	10.45	11.55	50	7	50	700	0.25	4	8.2	RCH
PZ1AH12B-AU	12	11.40	12.60	50	7	50	700	0.25	3	9.1	SCH
PZ1AH13B-AU	13	12.35	13.65	50	10	50	700	0.25	2	10	TCH
PZ1AH14B-AU	14	13.30	14.70	50	10	50	700	0.25	2	11	UCH
PZ1AH15B-AU	15	14.25	15.75	50	12	50	700	0.25	1	11	VCH
PZ1AH16B-AU	16	15.20	16.80	25	15	25	700	0.25	1	12	WCH
PZ1AH17B-AU	17	16.15	17.85	25	15	25	750	0.25	1	13	XCH
PZ1AH18B-AU	18	17.10	18.90	25	15	25	750	0.25	1	13	YCH
PZ1AH19B-AU	19	18.05	19.95	25	15	25	750	0.25	1	14	ZCH
PZ1AH20B-AU	20	19.00	21.00	25	15	25	750	0.25	1	15	2CH
PZ1AH22B-AU	22	20.90	23.10	25	15	25	750	0.25	1	16	3CH
PZ1AH24B-AU	24	22.80	25.20	25	15	25	750	0.25	1	18	4CH
PZ1AH25B-AU	25	23.75	26.25	25	15	25	750	0.25	1	19	6CH
PZ1AH27B-AU	27	25.65	28.35	25	15	25	750	0.25	1	20	7CH
PZ1AH28B-AU	28	26.60	29.40	25	15	25	850	0.25	1	21	9CH



PZ1AH3V6B-AU~PZ1AH75B-AU

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Part Number	Nominal Zener Voltage				Nominal Zener Impedance				Max. Reverse Leakage Current		Marking Code
	V _Z @I _{ZT}				Z _{ZT} @I _{ZT}		Z _{ZK} @I _{ZK}		I _R @V _R		
	Nom. V	Min. V	Max. V	mA	Ω	mA	Ω	mA	μA	V	
PZ1AH30B-AU	30	28.50	31.50	25	15	25	1000	0.25	1	22	AEH
PZ1AH33B-AU	33	31.35	34.65	25	15	25	1000	0.25	1	24	BEH
PZ1AH36B-AU	36	34.20	37.80	10	40	10	1000	0.25	1	27	CEH
PZ1AH39B-AU	39	37.05	40.95	10	40	10	1000	0.25	1	30	DEH
PZ1AH43B-AU	43	40.85	45.15	10	45	10	1500	0.25	1	33	EEH
PZ1AH47B-AU	47	44.65	49.35	10	45	10	1500	0.25	1	36	FEH
PZ1AH51B-AU	51	48.45	53.55	10	60	10	1500	0.25	1	39	HEH
PZ1AH56B-AU	56	53.20	58.80	10	60	10	2000	0.25	1	43	IEH
PZ1AH62B-AU	62	58.90	65.10	10	80	10	2000	0.25	1	47	JEH
PZ1AH68B-AU	68	64.60	71.40	10	80	10	2000	0.25	1	51	KEH
PZ1AH75B-AU	75	71.25	78.75	10	100	10	2000	0.25	1	56	LEH

PZ1AH3V6B-AU~PZ1AH75B-AU

TYPICAL CHARACTERISTIC CURVES

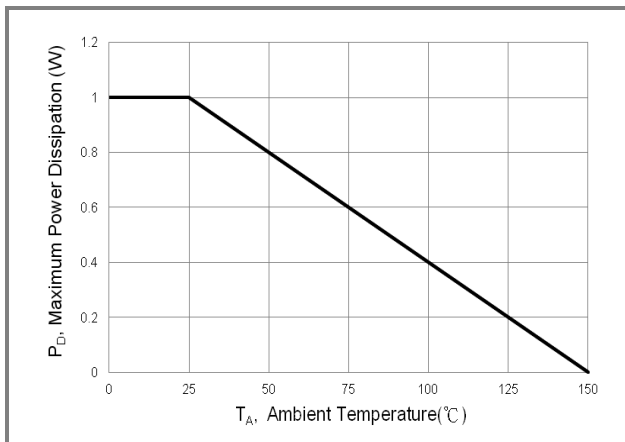


Fig.1 Steady-State Power Derating Curve

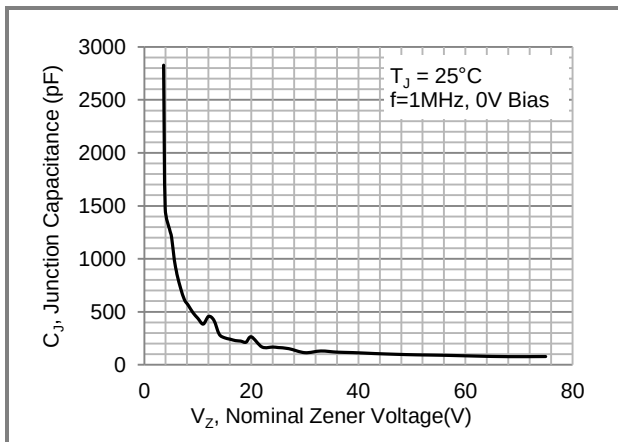


Fig.2 Typical Capacitance Versus V_Z

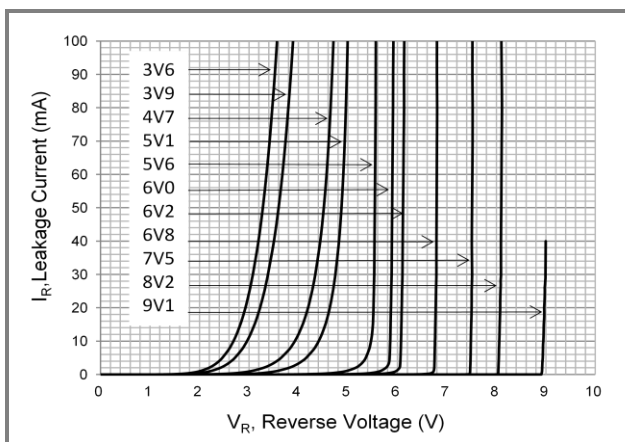


Fig.3 Typical Zener Breakdown Characteristics

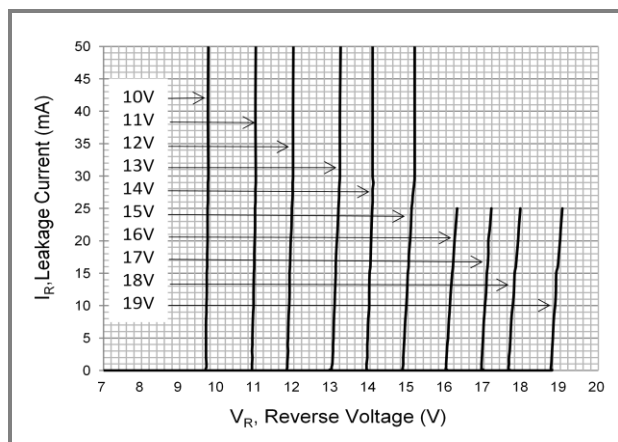


Fig.4 Typical Zener Breakdown Characteristics

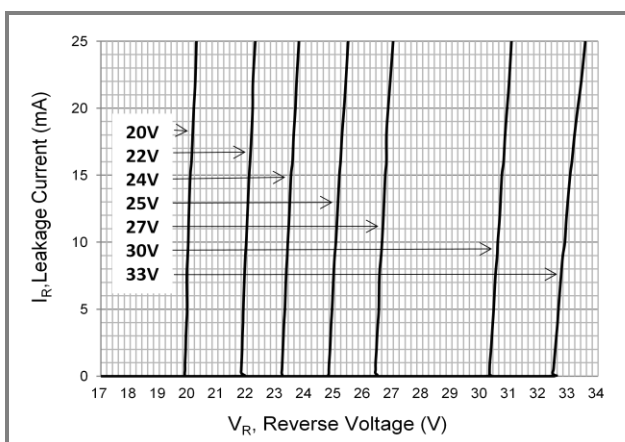


Fig.5 Typical Zener Breakdown Characteristics

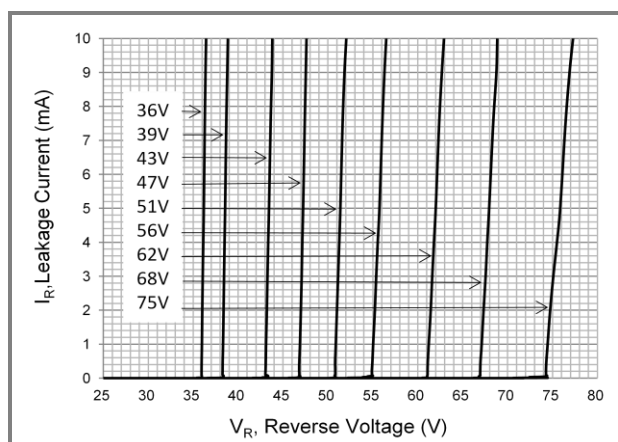


Fig.6 Typical Zener Breakdown Characteristics

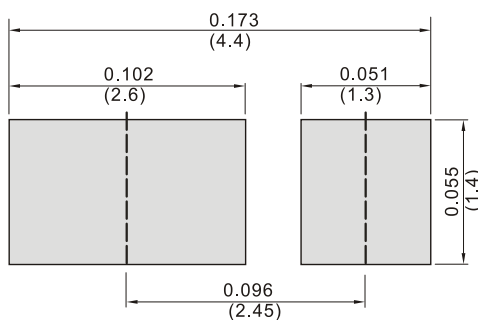
PZ1AH3V6B-AU~PZ1AH75B-AU

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
PZ1AH3V6B-AU_R1_000A1	SOD-123HE	3K pcs / 7" reel	ACH	Halogen free
PZ1AH3V6B-AU_R2_000A1	SOD-123HE	10K pcs / 13" reel	ACH	Halogen free

Mounting Pad Layout

SOD-123HE Unit : inch(mm)





PZ1AH3V6B-AU~PZ1AH75B-AU

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 relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, 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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

[PZ1AH9V1B-AU_R1_000A1](#) [PZ1AH9V1B-AU_R2_000A1](#)