



PZS513V9BCH-AU ~ PZS5143BCH-AU Series

SILICON ZENER DIODE

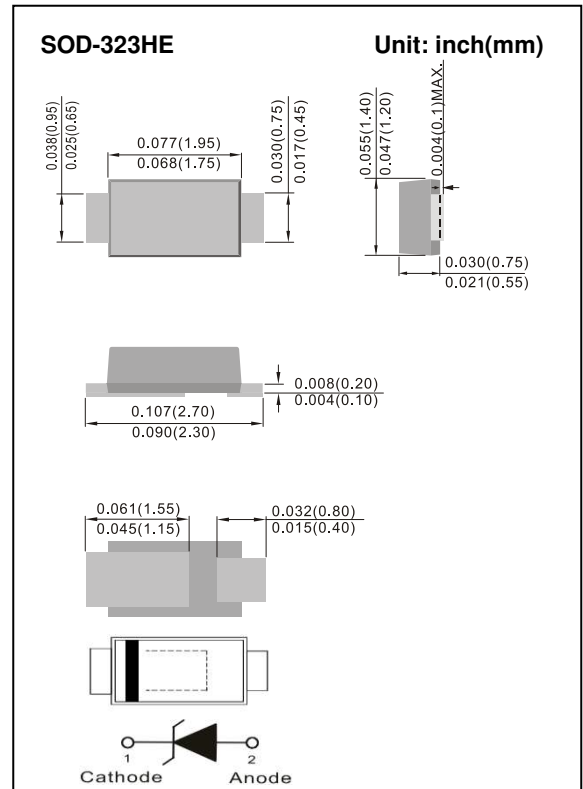
Voltage 3.9~43 V **Power** 500 mW

Features

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

Mechanical Data

- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.0002 ounces, 0.005 grams



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

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation at $T_A=25^\circ\text{C}$	$P_D^{(1)}$	500	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}^{(2)}$	250	$^\circ\text{C}/\text{W}$
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 .



PZS513V9BCH-AU ~ PZS5143BCH-AU Series

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

Part Number	Nominal Zener Voltage				Max. Reverse Leakage Current		Marking Code
	$V_Z@I_{ZT}$				$I_R@V_R$		
	Nom. V	Min. V	Max. V	mA	μA	V	
PZS513V9BCH-AU	3.9	3.71	4.10	0.05	5	2	AJS
PZS514V3BCH-AU	4.3	4.09	4.52	0.05	4	2	BJS
PZS514V7BCH-AU	4.7	4.47	4.94	0.05	10	3	CJS
PZS515V1BCH-AU	5.1	4.85	5.36	0.05	10	3	DJS
PZS515V3BCH-AU	5.3	5.03	5.57	0.05	10	4	EJS
PZS515V6BCH-AU	5.6	5.32	5.88	0.05	7	4.2	FJS
PZS516V2BCH-AU	6.2	5.89	6.51	0.05	10	5	HJS
PZS516V8BCH-AU	6.8	6.46	7.14	0.05	10	5.1	IJS
PZS517V5BCH-AU	7.5	7.13	7.88	0.05	10	5.7	JJS
PZS518V2BCH-AU	8.2	7.79	8.61	0.05	1	6.2	KJS
PZS518V7BCH-AU	8.7	8.27	9.14	0.05	1	6.6	LJS
PZS519V1BCH-AU	9.1	8.65	9.56	0.05	1	6.9	MJS
PZS5110BCH-AU	10	9.5	10.5	0.05	1	7.6	NJS
PZS5111BCH-AU	11	10.5	11.6	0.05	0.05	8.4	PJS
PZS5112BCH-AU	12	11.4	12.6	0.05	0.05	9.1	RJS
PZS5113BCH-AU	13	12.4	13.7	0.05	0.05	9.8	SJS
PZS5114BCH-AU	14	13.3	14.7	0.05	0.05	10.6	TJS
PZS5115BCH-AU	15	14.3	15.8	0.05	0.05	11.4	UJS
PZS5116BCH-AU	16	15.2	16.8	0.05	0.05	12.1	VJS
PZS5117BCH-AU	17	16.2	17.9	0.05	0.05	12.9	WJS
PZS5118BCH-AU	18	17.1	18.9	0.05	0.05	13.6	XJS
PZS5119BCH-AU	19	18.1	20	0.05	0.05	14.4	YJS
PZS5120BCH-AU	20	19	21	0.05	0.01	15.2	ZJS
PZS5122BCH-AU	22	20.9	23.1	0.05	0.01	16.7	2JS
PZS5124BCH-AU	24	22.8	25.2	0.05	0.01	18.2	3JS
PZS5125BCH-AU	25	23.8	26.3	0.05	0.01	19	4JS
PZS5127BCH-AU	27	25.7	28.4	0.05	0.01	20.4	6JS
PZS5128BCH-AU	28	26.6	29.4	0.05	0.01	21.2	7JS
PZS5130BCH-AU	30	28.5	31.5	0.05	0.01	22.8	9JS
PZS5133BCH-AU	33	31.4	34.7	0.05	0.01	25	AKS
PZS5136BCH-AU	36	34.2	37.8	0.05	0.01	27.3	BKS
PZS5139BCH-AU	39	37.1	41	0.05	0.01	29.6	CKS
PZS5143BCH-AU	43	40.9	45.2	0.05	0.01	32.6	DKS



PZS513V9BCH-AU ~ PZS5143BCH-AU Series

TYPICAL CHARACTERISTIC CURVES

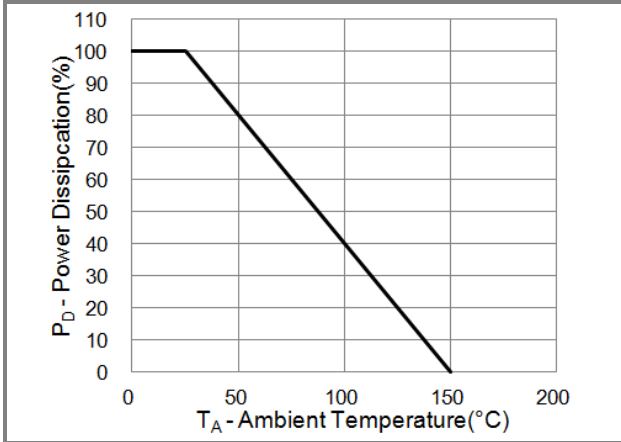


Fig.1 Power Derating Curve

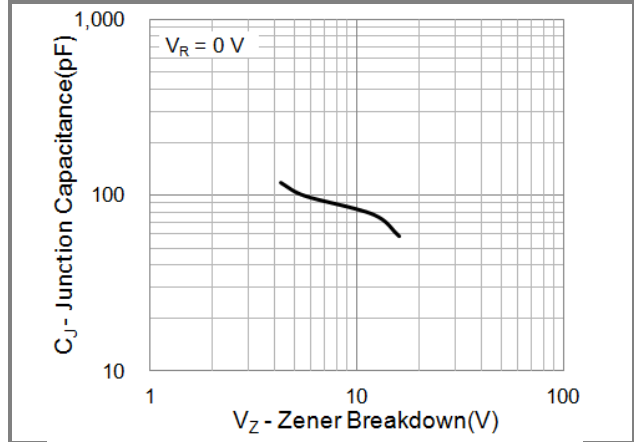


Fig.2 Typical Junction Capacitance

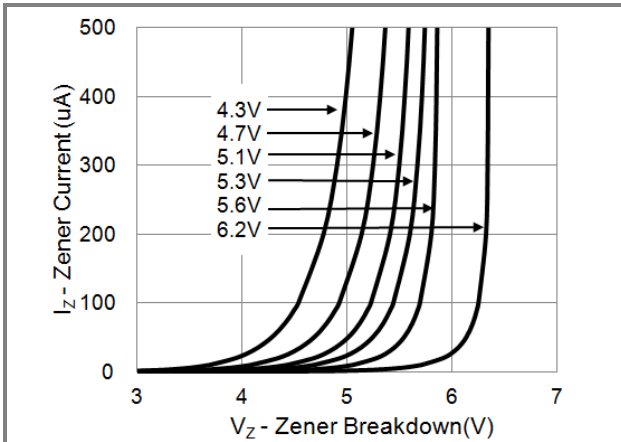


Fig.3 Typical Zener Breakdown

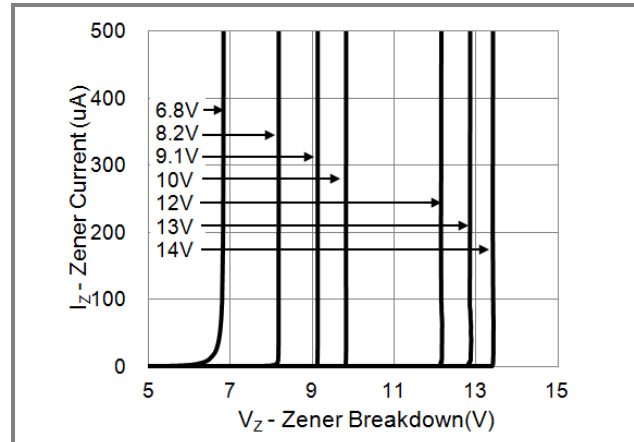


Fig.4 Typical Zener Breakdown

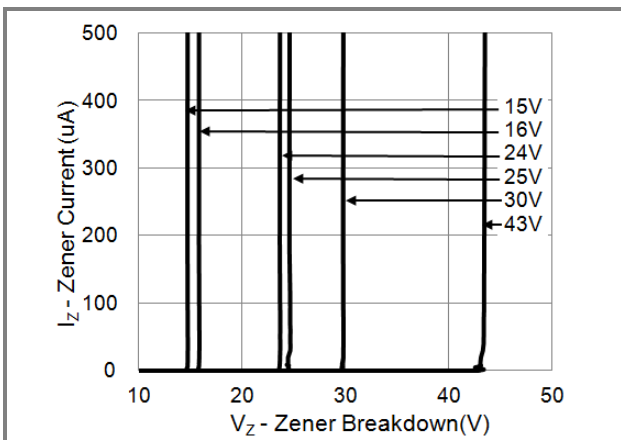


Fig.5 Typical Zener Breakdown



PZS513V9BCH-AU ~ PZS5143BCH-AU Series

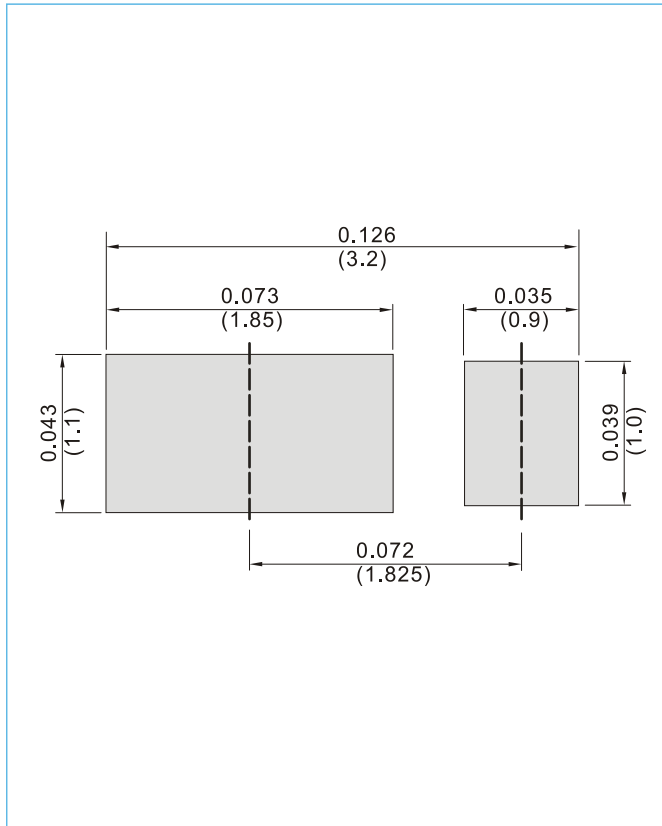
PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
PZS51xxxCH-AU_R1_000A1	SOD-323HE	5K / 7" Reel	See Table	Halogen Free

MOUNTING PAD LAYOUT

SOD-323HE

Unit : inch(mm)





PZS513V9BCH-AU ~ PZS5143BCH-AU Series

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.