



PZS51A3V9CS ~ PZS51A43CS Series

SILICON ZENER DIODE

Voltage

3.9~43 V

Power

200 mW

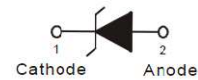
Features

- Planar Die construction
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOD-323 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.00014 ounces, 0.0041 grams

SOD-323



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation at T _A = 25 °C	P _D ⁽¹⁾	200	mW
Typical Thermal Resistance Junction to Ambient	R _{θJA} ⁽²⁾	650	°C/W
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C



PZS51A3V9CS ~ PZS51A43CS 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	
PZS51A3V9CS	3.9	3.82	3.98	0.05	5	2	ACH
PZS51A4V3CS	4.3	4.21	4.39	0.05	4	2	BCH
PZS51A4V7CS	4.7	4.61	4.79	0.05	10	3	CCH
PZS51A5V1CS	5.1	5.00	5.20	0.05	10	3	DCH
PZS51A5V3CS	5.3	5.19	5.41	0.05	10	4	ECH
PZS51A5V6CS	5.6	5.49	5.71	0.05	7	4.2	FCH
PZS51A6V2CS	6.2	6.08	6.32	0.05	10	5	HCH
PZS51A6V8CS	6.8	6.66	6.94	0.05	10	5.1	ICH
PZS51A7V5CS	7.5	7.35	7.65	0.05	10	5.7	JCH
PZS51A8V2CS	8.2	8.04	8.36	0.05	1	6.2	KCH
PZS51A8V7CS	8.7	8.53	8.87	0.05	1	6.6	LCH
PZS51A9V1CS	9.1	8.92	9.28	0.05	1	6.9	MCH
PZS51A10CS	10	9.80	10.20	0.05	1	7.6	NCH
PZS51A11CS	11	10.78	11.22	0.05	0.05	8.4	PCH
PZS51A12CS	12	11.76	12.24	0.05	0.05	9.1	RCH
PZS51A13CS	13	12.74	13.26	0.05	0.05	9.8	SCH
PZS51A14CS	14	13.72	14.28	0.05	0.05	10.6	TCH
PZS51A15CS	15	14.70	15.30	0.05	0.05	11.4	UCH
PZS51A16CS	16	15.68	16.32	0.05	0.05	12.1	VCH
PZS51A17CS	17	16.66	17.34	0.05	0.05	12.9	WCH
PZS51A18CS	18	17.64	18.36	0.05	0.05	13.6	XCH
PZS51A19CS	19	18.62	19.38	0.05	0.05	14.4	YCH
PZS51A20CS	20	19.60	20.40	0.05	0.01	15.2	ZCH
PZS51A22CS	22	21.56	22.44	0.05	0.01	16.7	2CH
PZS51A24CS	24	23.52	24.48	0.05	0.01	18.2	3CH
PZS51A25CS	25	24.50	25.50	0.05	0.01	19	4CH
PZS51A27CS	27	26.46	27.54	0.05	0.01	20.4	6CH
PZS51A28CS	28	27.44	28.56	0.05	0.01	21.2	7CH
PZS51A30CS	30	29.40	30.60	0.05	0.01	22.8	9CH



PZS51A3V9CS ~ PZS51A43CS 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	
PZS51A33CS	33	32.34	33.66	0.05	0.01	25	AEH
PZS51A36CS	36	35.28	36.72	0.05	0.01	27.3	BEH
PZS51A39CS	39	38.22	39.78	0.05	0.01	29.6	CEH
PZS51A43CS	43	42.14	43.86	0.05	0.01	32.6	DEH

NOTES :

1. Mounted on a FR-4 PCB, single-sided copper, with 100cm² copper pad area
2. Mounted on a FR4 PCB, single-sided copper, standard footprint



PZS51A3V9CS ~ PZS51A43CS Series

TYPICAL CHARACTERISTIC CURVES

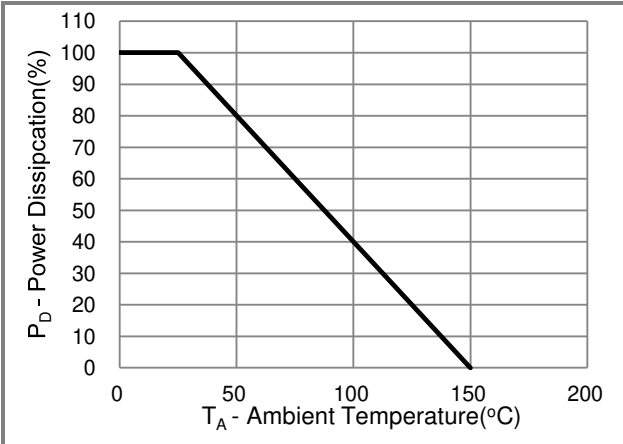


Fig.1 Power Rating Curve

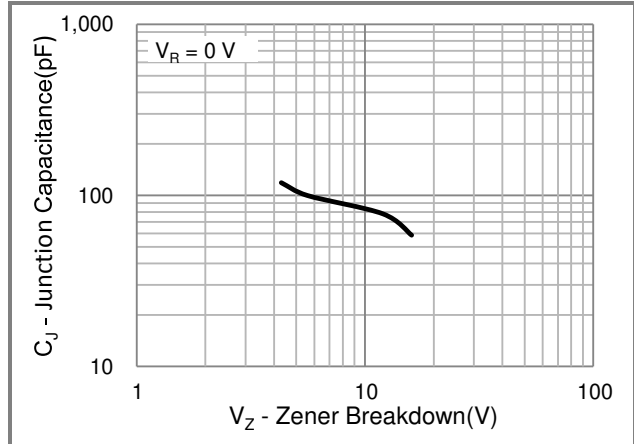


Fig.2 Typical Junction Capacitance

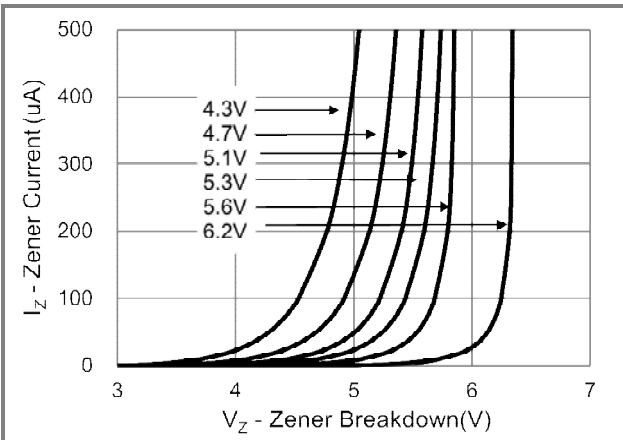


Fig.3 Typical Zener Breakdown

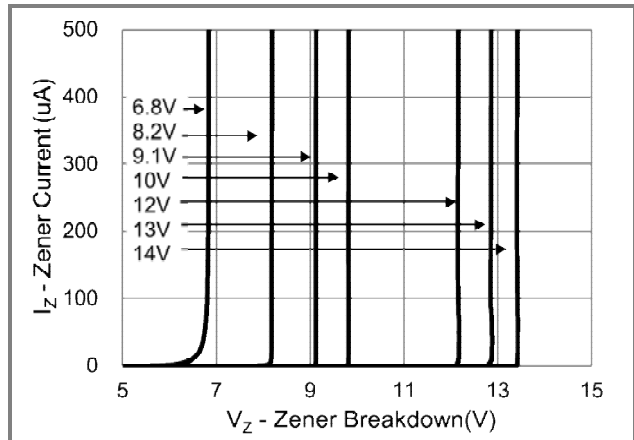


Fig.4 Typical Zener Breakdown

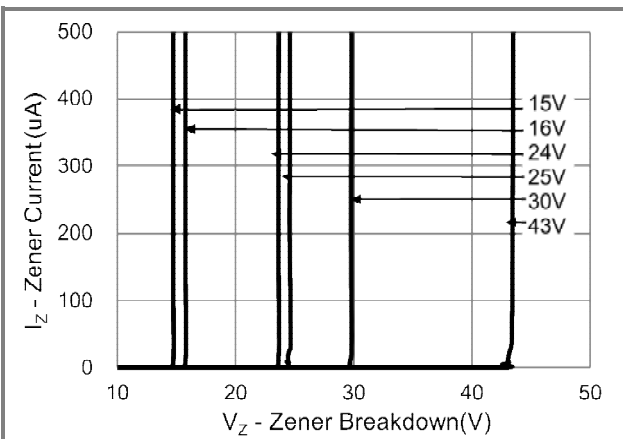


Fig.5 Typical Zener Breakdown

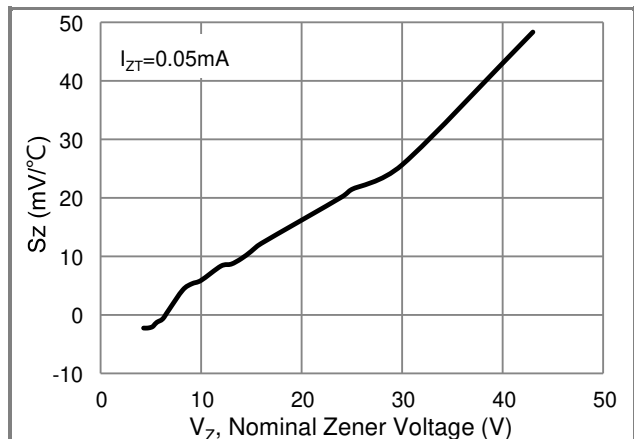


Fig.6 Typical Temperature Coefficient

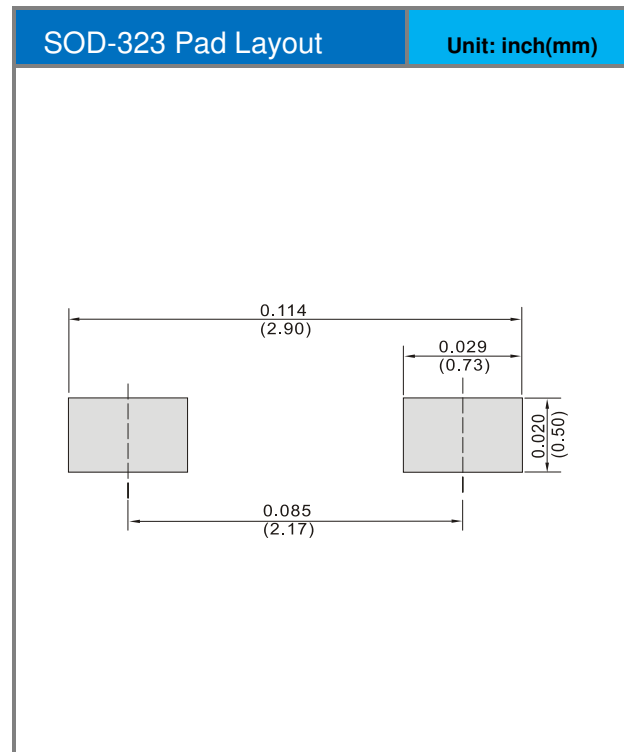
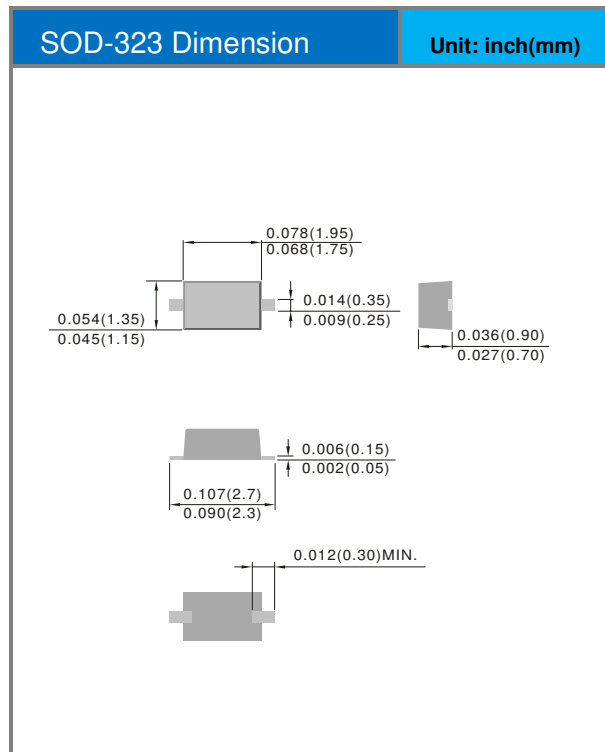


PZS51A3V9CS ~ PZS51A43CS Series

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
PZS51AxxxCS_R1_00001	SOD-323	5K / 7" Reel	See Table	Halogen free

Packaging Information & Mounting Pad Layout





PZS51A3V9CS ~ PZS51A43CS 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 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.