

PZA1AL5V6B ~ PZA1AL43B Series

Silicon Zener Diode

Voltage

5.6~43 V

Power

1 Watt

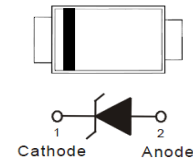
Features

- Silicon planar Zener diode
- Low profile surface-mount package
- Low leakage current
- Excellent stability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOD-123FL Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0173 grams

SOD-123FL



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 ^(Note 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 ^(Note 1)	R _{θJA}	125	°C /W
Typical Thermal Resistance ^(Note 2)	R _{θJA}	200	°C /W
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

NOTES :

1. Mounted on PCB with 10cm x 5cm copper pads to each terminal.
2. Mounted on a FR-4 PCB, single-sided copper, Standard footprint.

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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
	$V_Z@I_{ZT}$				$Z_{ZT}@I_{ZT}$		$I_R@V_R$		
	Nom. V	Min. V	Max. V	mA	Ω	mA	μA	V	
PZA1AL5V6B	5.6	5.32	5.88	20	40	20	20	2	KFH
PZA1AL6V2B	6.2	5.89	6.51	10	30	10	20	3	LFH
PZA1AL6V8B	6.8	6.46	7.14	10	30	10	10	3	MFH
PZA1AL7V5B	7.5	7.13	7.88	10	30	10	10	3	NFH
PZA1AL8V2B	8.2	7.79	8.61	10	30	10	10	4	PFH
PZA1AL9V1B	9.1	8.65	9.56	10	30	10	10	5	RFH
PZA1AL10B	10	9.5	10.5	10	30	10	10	7	SFH
PZA1AL11B	11	10.45	11.55	10	30	10	10	7	TFH
PZA1AL12B	12	11.4	12.6	10	30	10	10	8	UFH
PZA1AL13B	13	12.35	13.65	10	30	10	10	9	VFH
PZA1AL14B	14	13.3	14.7	10	30	10	10	10	WFH
PZA1AL15B	15	14.25	15.75	10	30	10	10	10	XFH
PZA1AL16B	16	15.2	16.8	10	30	10	10	11	YFH
PZA1AL17B	17	16.15	17.85	10	30	10	10	12	ZFH
PZA1AL18B	18	17.1	18.9	10	30	10	10	13	2FH
PZA1AL19B	19	18.05	19.95	10	30	10	10	13.3	3FH
PZA1AL20B	20	19	21	10	30	10	10	14	6FH
PZA1AL22B	22	20.9	23.1	10	30	10	10	16	7FH
PZA1AL24B	24	22.8	25.2	10	30	10	10	17	9FH
PZA1AL25B	25	23.75	26.25	10	30	10	10	17.5	AHH
PZA1AL27B	27	25.65	28.35	10	30	10	10	19	BHH
PZA1AL28B	28	26.6	29.4	10	30	10	10	19.6	CHH
PZA1AL30B	30	28.5	31.5	10	30	10	10	21	DHH
PZA1AL33B	33	31.35	34.65	10	30	10	10	26.4	EHH
PZA1AL36B	36	34.2	37.8	5	30	5	10	28.8	FHH
PZA1AL39B	39	37.05	40.95	5	65	5	10	31.8	HHH
PZA1AL43B	43	40.85	45.15	5	65	5	10	35.8	IHH

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TYPICAL CHARACTERISTIC CURVES

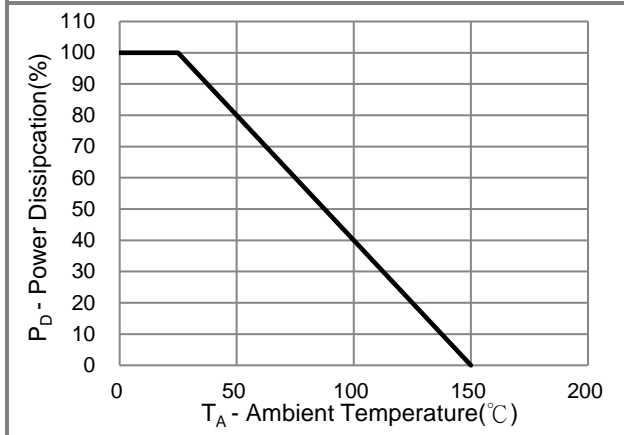


Fig.1 Power Derating Curve

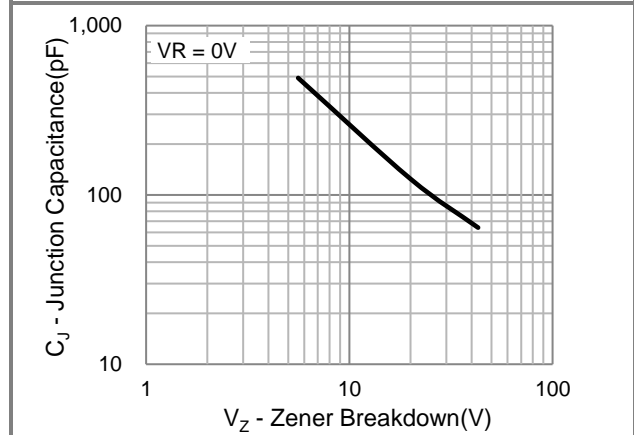


Fig.2 Typical Junction Capacitance

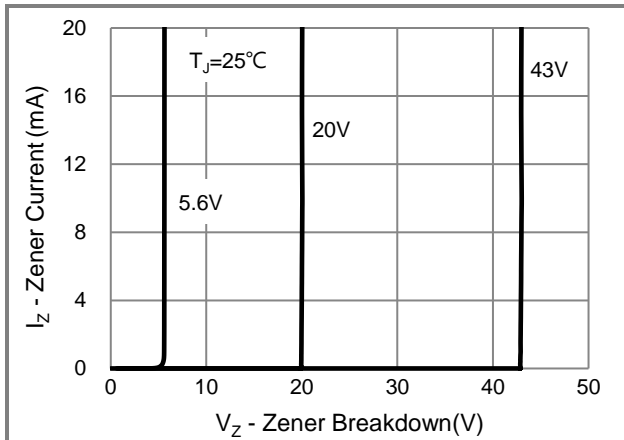


Fig.3 Typical Zener Breakdown

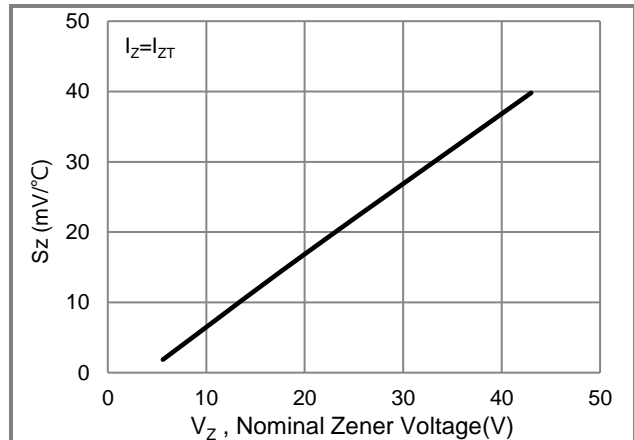


Fig.4 Typical Temperature coefficient

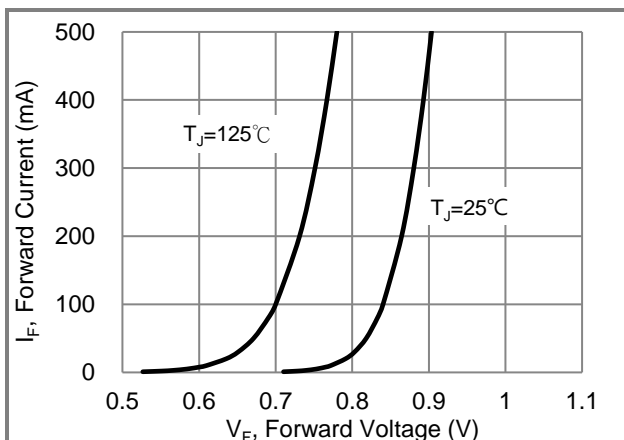


Fig.5 Typical Forward Characteristics

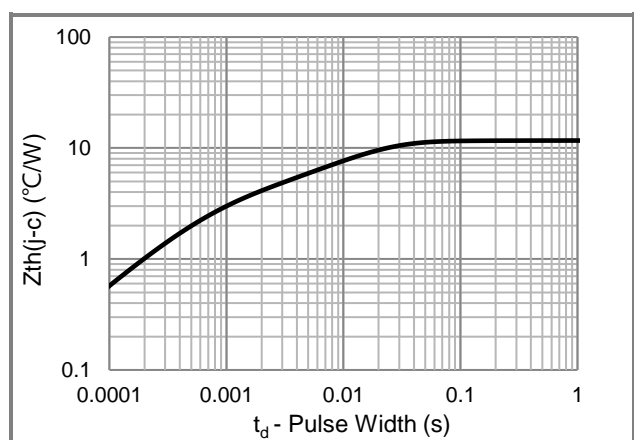


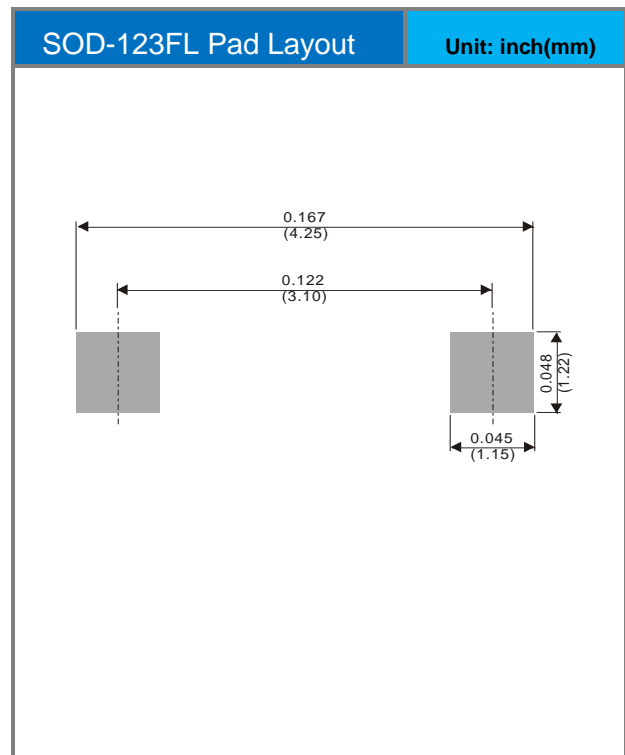
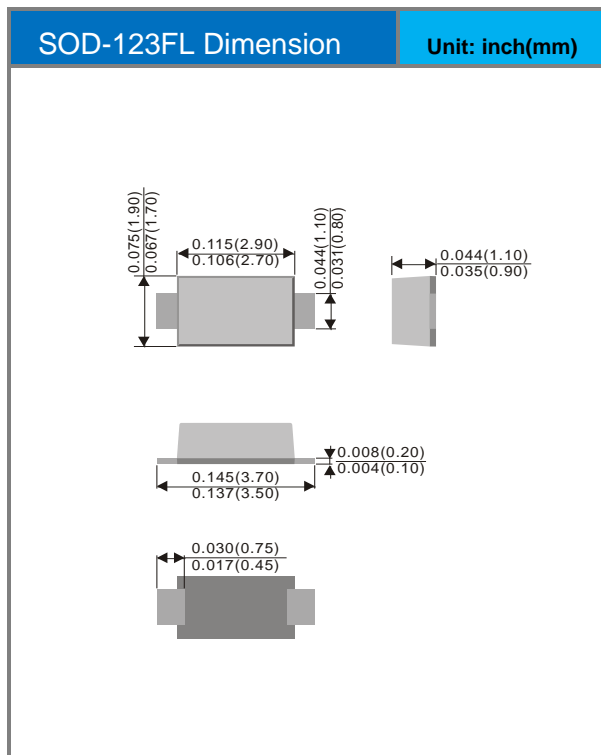
Fig.6 Typical Transient Thermal Impedance

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Product and Packing Information

Part No.	Package Type	Packing Type	Marking
PZA1ALxxxB	SOD-123FL	3K pcs / 7" reel	See Table

Packaging Information & Mounting Pad Layout



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