



# AZ23C2V4 SERIES

## DUAL SURFACE MOUNT ZENER DIODES

**VOLTAGE** 2.4 to 51 Volts **POWER** 300 mWatts

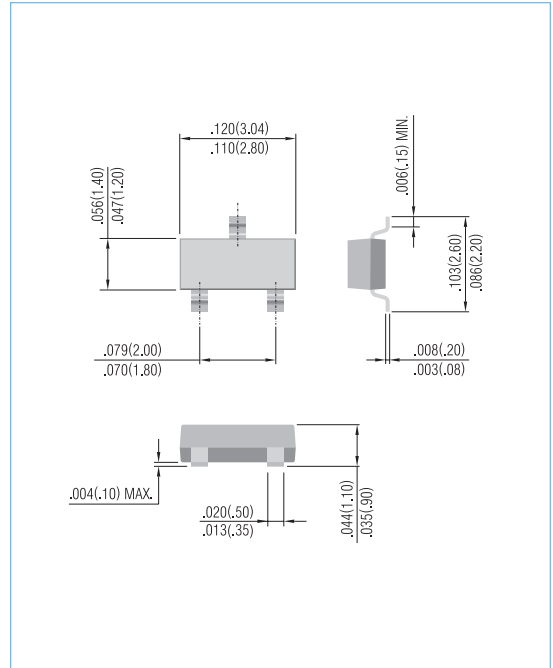
**SOT-23** Unit: inch ( mm )

### FEATURES

- Dual Zeners in Common Anode Configuration
- 300mW Power Dissipation Rating
- Zener Voltages from 2.4~51V
- Ideally Suited for Automatic Insertion
- Common Cathode Style Available See DZ Series
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

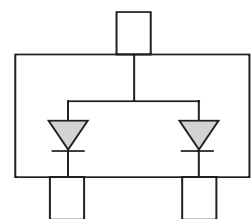
- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram
- Approx. Weight: 0.008 grams
- Mounting Position: Any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Power Dissipation (Note 1)	$P_D$	300	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	417	$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^{\circ}C$

### COMMON ANODE



### NOTES:

- Mounted on 5.0mm<sup>2</sup>(.013mm thick) land areas.
- Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

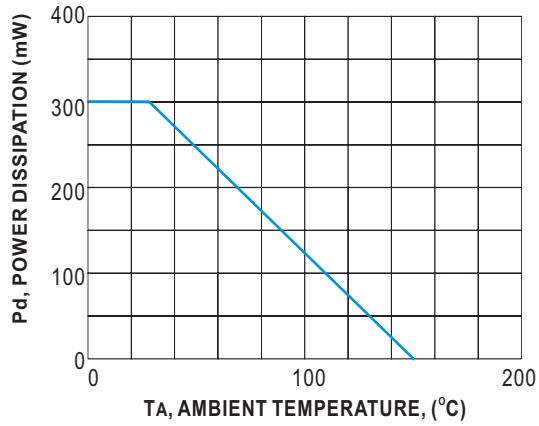


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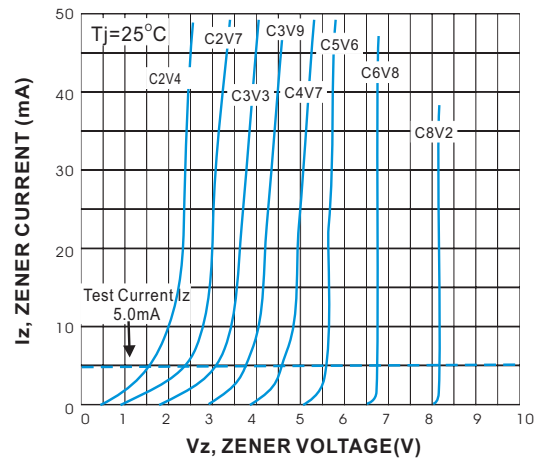
Part Number	Nominal Zener Voltage			Max. Zener Impedance				Max Reverse Leakage Current		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			Z <sub>VT</sub> @ I <sub>ZT</sub>		Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R</sub> @ V <sub>R</sub>		
	Nom. V	Min. V	Max. V	Ω	mA	Ω	mA	μA	V	
AZ23C2V4	2.4	2.28	2.52	85	5.0	600	1.00	100	1.0	DO
AZ23C2V7	2.7	2.57	2.84	83	5.0	600	1.00	75	1.0	DA
AZ23C3V0	3.0	2.85	3.15	95	5.0	600	1.00	50	1.0	DB
AZ23C3V3	3.3	3.14	3.47	95	5.0	600	1.00	25	1.0	DC
AZ23C3V6	3.6	3.42	3.78	95	5.0	600	1.00	15	1.0	DD
AZ23C3V9	3.9	3.71	4.10	95	5.0	600	1.00	10	1.0	DE
AZ23C4V3	4.3	4.09	4.52	95	5.0	600	1.00	5.0	1.0	DF
AZ23C4V7	4.7	4.47	4.94	78	5.0	500	1.00	5.0	2.0	DG
AZ23C5V1	5.1	4.85	5.36	60	5.0	480	1.00	0.1	0.8	DH
AZ23C5V6	5.6	5.32	5.88	40	5.0	400	1.00	0.1	1.0	DI
AZ23C6V2	6.2	5.89	6.51	10	5.0	150	1.00	0.1	2.0	DJ
AZ23C6V8	6.8	6.46	7.14	8	5.0	80	1.00	0.1	3.0	D11
AZ23C7V5	7.5	7.13	7.88	7	5.0	80	1.00	0.1	5.0	D12
AZ23C8V2	8.2	7.79	8.61	7	5.0	80	1.00	0.1	6.0	D13
AZ23C9V1	9.1	8.65	9.56	10	5.0	100	1.00	0.1	7.0	D14
AZ23C10	10	9.50	10.50	15	5.0	150	1.00	0.1	7.5	D15
AZ23C11	11	10.45	11.55	20	5.0	150	1.00	0.1	8.5	D16
AZ23C12	12	11.40	12.60	20	5.0	150	1.00	0.1	9.0	D17
AZ23C13	13	12.35	13.65	25	5.0	170	1.00	0.1	10.0	D18
AZ23C14	14	13.30	14.70	25	5.0	170	1.00	0.1	10.5	DK
AZ23C15	15	14.25	15.75	30	5.0	200	1.00	0.1	11.0	D19
AZ23C16	16	15.20	16.80	40	5.0	200	1.00	0.1	12.0	D20
AZ23C17	17	16.15	17.85	40	5.0	200	1.00	0.1	13.0	DL
AZ23C18	18	17.10	18.90	50	5.0	225	1.00	0.1	14.0	D21
AZ23C20	20	19.00	21.00	50	5.0	225	1.00	0.1	15.0	D22
AZ23C22	22	20.90	23.10	55	5.0	250	1.00	0.1	17.0	D23
AZ23C24	24	22.80	25.20	80	5.0	250	1.00	0.1	18.0	D24
AZ23C27	27	25.65	28.35	80	5.0	300	1.00	0.1	20.0	D25
AZ23C28	28	26.60	29.40	80	5.0	300	1.00	0.1	22.0	DM
AZ23C30	30	28.50	31.50	80	5.0	300	1.00	0.1	22.5	D26
AZ23C33	33	31.35	34.65	80	5.0	325	1.00	0.1	25.0	D27
AZ23C36	36	34.20	37.80	90	5.0	350	1.00	0.1	27.0	D28
AZ23C39	39	37.05	40.95	90	5.0	350	1.00	0.1	29.0	D29
AZ23C43	43	40.85	45.15	100	5.0	375	1.00	0.1	32.0	D30
AZ23C47	47	44.65	49.35	100	5.0	375	1.00	0.1	35.0	D31
AZ23C51	51	48.45	53.55	100	5.0	400	1.00	0.1	38.0	D32



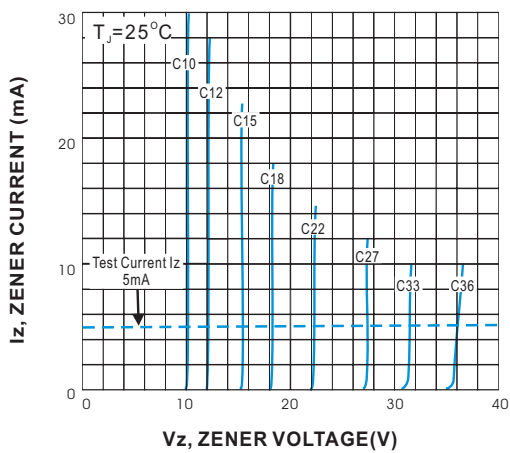
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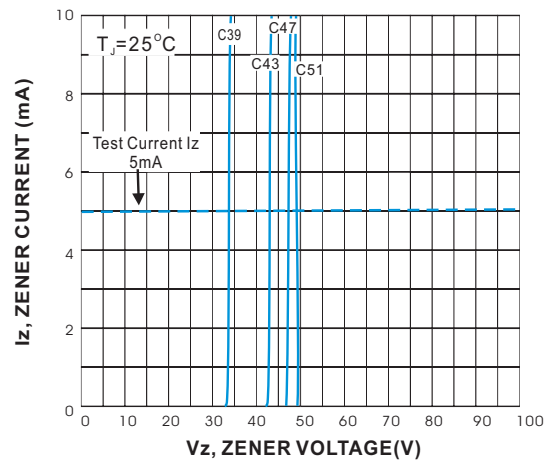
**Fig.1 POWER DERATING CURVE**



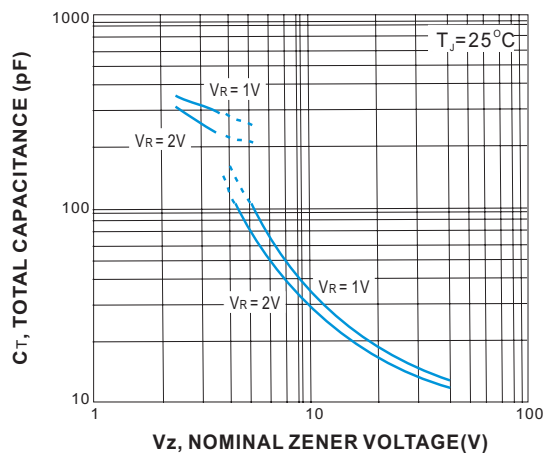
**Fig.2 ZENER BREAKDOWN CHARACTERISTICS**



**Fig.3 ZENER BREAKDOWN CHARACTERISTICS**



**Fig.4 ZENER BREAKDOWN CHARACTERISTICS**

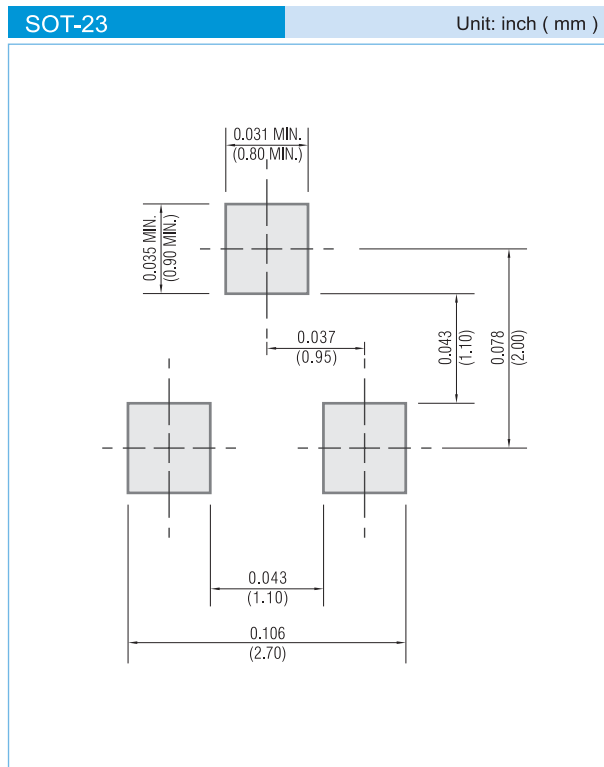


**Fig.5 TOTAL CAPACITANCE VS NOMINAL ZENER VOLTAGE**



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## MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

### LEGAL STATEMENT

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