

Features

- Large selection of zener voltages: 2.4V ~ 75V
- Tight voltage tolerance: $\pm 5\%$
- Ultra low-profile package well suited for automated assembly
- Compliant to Halogen-free

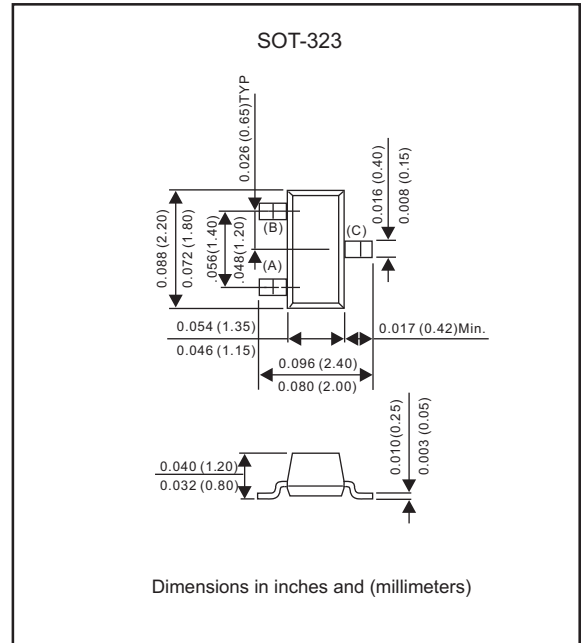
Applications

- General voltage regulation
- Mobile & handheld systems

Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : Molded plastic, SOT-323
- Terminals :Plated terminals, solderable per MIL-STD-750, Method 2026
- Mounting Position : Any

Package outline



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

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Power dissipation		P_D			200	mW
Thermal resistance	Junction to ambient	$R_{\theta JA}$		625		$^\circ\text{C} / \text{W}$
Operating junction temperature range		T_J	-55		+150	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55		+150	$^\circ\text{C}$

Note: These ratings are limiting values above which the serviceability of the diodes may be impaired.

Electrical characteristics (at T_A=25°C unless otherwise noted)

Part No.	Marking code	Zener voltage			Test current	Zener impedance			Leakage current	
		V _Z @ I _{ZT}				I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R
		Min.(V)	Nom.(V)	Max.(V)	mA	(Ω)Max	(Ω)Max	mA	(uA)Max	Volts
AZ23C2V4W	KD0/BE	2.2	2.4	2.6	5	100	600	1.0	100	1.0
AZ23C2V7W	KD1/BF	2.5	2.7	2.9	5	100	600	1.0	75	1.0
AZ23C3V0W	KD2/BH	2.8	3.0	3.2	5	95	600	1.0	50	1.0
AZ23C3V3W	KD3/BJ	3.1	3.3	3.5	5	95	600	1.0	25	1.0
AZ23C3V6W	KD4/BK	3.4	3.6	3.8	5	95	600	1.0	15	1.0
AZ23C3V9W	KD5/BM	3.7	3.9	4.1	5	95	600	1.0	10	1.0
AZ23C4V3W	KD6/BN	4.0	4.3	4.6	5	95	600	1.0	5	1.0
AZ23C4V7W	KD7/BP	4.4	4.7	5.0	5	80	600	1.0	5	2.0
AZ23C5V1W	KD8/BR	4.8	5.1	5.4	5	60	500	1.0	2	2.0
AZ23C5V6W	KD9/BX	5.2	5.6	6.0	5	40	480	1.0	1	2.0
AZ23C6V2W	KDA/BY	5.8	6.2	6.6	5	10	400	1.0	3	4.0
AZ23C6V8W	KDB/BZ	6.4	6.8	7.2	5	15	150	1.0	2	4.0
AZ23C7V5W	KDC/CA	7.0	7.5	7.9	5	15	80	1.0	1	5.0
AZ23C8V2W	KDD/CB	7.7	8.2	8.7	5	15	80	1.0	0.7	5.0
AZ23C9V1W	KDE/CC	8.5	9.1	9.6	5	15	80	1.0	0.5	6.0
AZ23C10W	KDF/CD	9.4	10	10.6	5	20	100	1.0	0.2	7.0
AZ23C11W	KDG/CE	10.4	11	11.6	5	20	150	1.0	0.1	8.5
AZ23C12W	KDH/CF	11.4	12	12.7	5	25	150	1.0	0.1	9.0
AZ23C13W	KDI/CH	12.35	13	14.1	5	30	150	1.0	0.1	10.0
AZ23C15W	KDJ/CJ	13.8	15	15.75	5	30	170	1.0	0.1	11.0
AZ23C16W	KDK/CK	15.2	16	17.1	5	40	200	1.0	0.1	12.0
AZ23C18W	KDL/CM	16.8	18	19.1	5	50	200	1.0	0.1	14.0
AZ23C20W	KDM/CN	18.8	20	21.2	5	55	225	1.0	0.1	15.0
AZ23C22W	KDN/CP	20.8	22	23.3	5	55	225	1.0	0.1	17.0
AZ23C24W	KDO/CR	22.8	24	25.6	5	80	250	1.0	0.1	18.0
AZ23C27W	KDP/CX	25.1	27	28.9	5	80	250	1.0	0.1	20.0
AZ23C30W	KDQ/CY	28.0	30	32.0	5	80	250	1.0	0.1	22.5
AZ23C33W	KDR/CZ	31.0	33	35.0	5	80	250	1.0	0.1	25.0
AZ23C36W	KDS/DE	34.0	36	38.0	5	90	250	1.0	0.1	27.0
AZ23C39W	KDT/DF	37.0	39	41.0	5	130	300	1.0	0.1	29.0
AZ23C43W	KDU/DH	40.0	43	46.0	5	150	700	1.0	0.1	32.0
AZ23C47W	KDV/DJ	44.0	47	50.0	5	170	750	1.0	0.1	35.0
AZ23C51W	KDW/DK	48.0	51	54.0	5	180	750	1.0	0.1	38.0
AZ23C56W	DM	52.0	56	60.0	2	200	425	0.5	0.1	39.2
AZ23C62W	DN	58.0	62	66.0	2	215	450	0.5	0.1	43.4
AZ23C68W	DP	64.0	68	72.0	2	240	475	0.5	0.1	47.6
AZ23C75W	DR	70.0	75	79.0	2	255	500	0.5	0.1	52.5

*1 Pulse width = 20 ms

Rating and characteristic curves

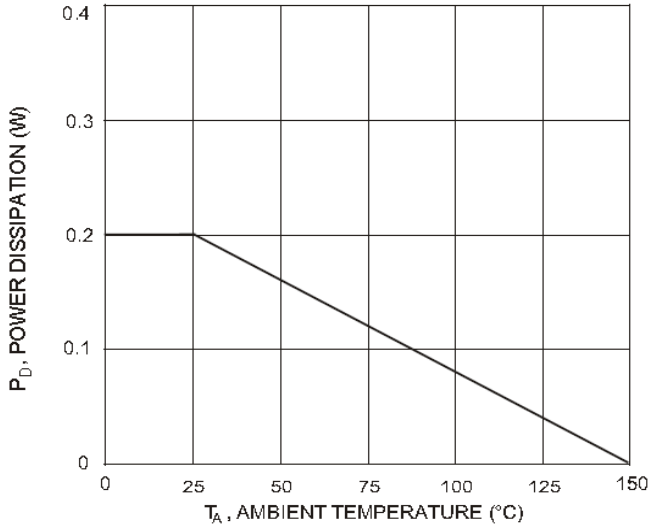


Fig. 1 Power Derating Curve

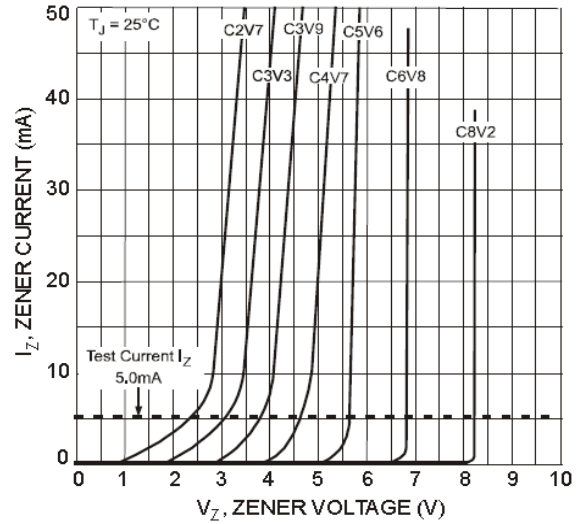


Fig. 2 Typical Zener Breakdown Characteristics

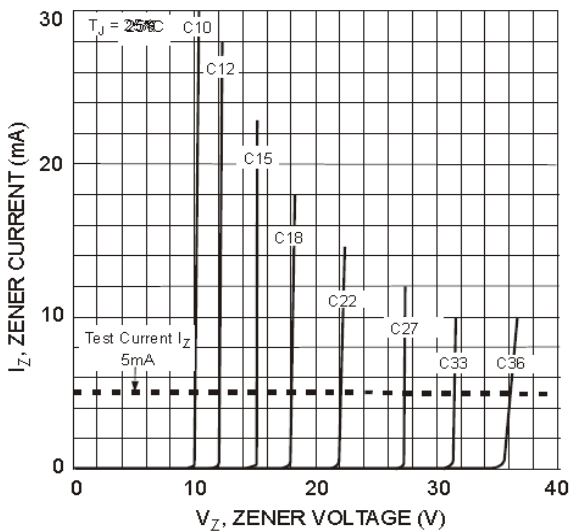


Fig. 3 Typical Zener Breakdown Characteristics

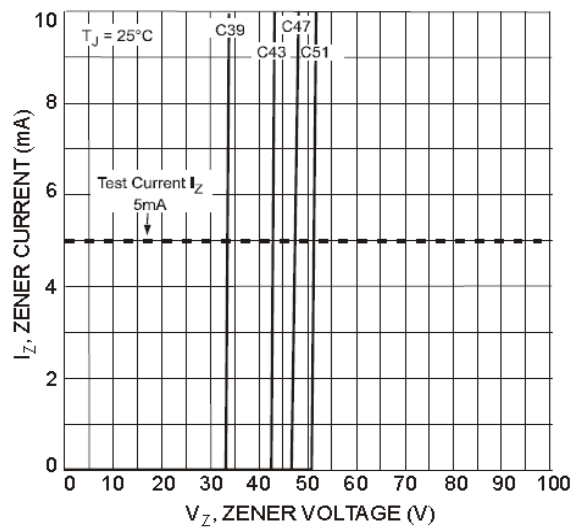
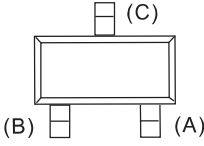
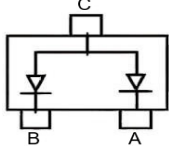


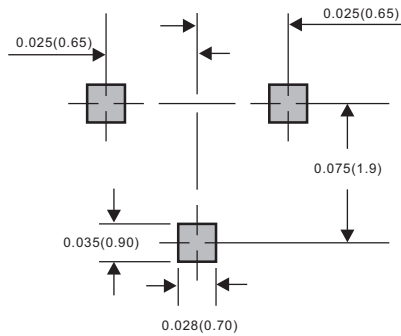
Fig. 4 Typical Zener Breakdown Characteristics

Pinning information

Pin	Simplified outline	Symbol
PinA cathode PinB cathode PinC anode		

Suggested solder pad layout

SOT-323



Dimensions in inches and (millimeters)