

AZ23C2V7 THRU AZ23C39

PowerDissipation 0.3 W  
VOLTAGE 2.7 to 39 V

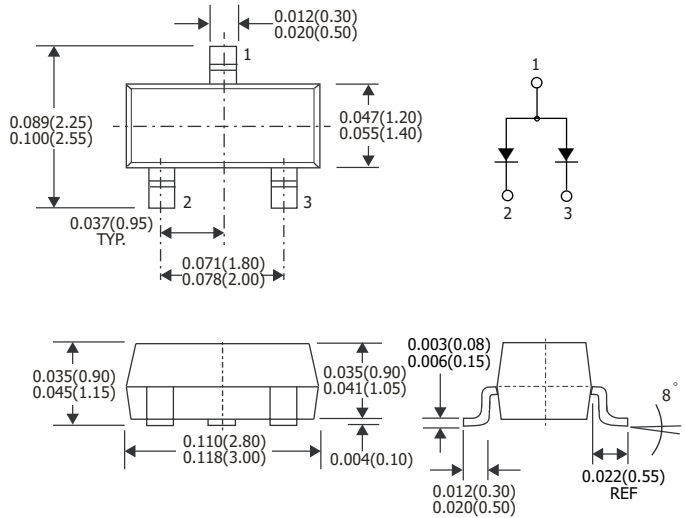
### Features

- Dual zeners in common anode configuration.
- Power Dissipation of 300mW
- Ideally suited for automatic insertion.

### Mechanical Data

- Package : SOT-23 Small Outline Plastic Package
- Epoxy UL : 94V-0
- Mounting position : Any

### SOT-23



Dimensions in inches and (millimeters)

### Maximum Ratings And Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified)

Items	Symbols	Value	Units
Power Dissipation	P <sub>D</sub>	300	mW
Forward Voltage @ I <sub>F</sub> =10mA	V <sub>F</sub>	0.9	V
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	417	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150	°C



## RATINGS AND CHARACTERISTIC CURVES AZ23C2V7 THRU AZ23C39

### Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Type Number	Marking Code	Zener Voltage Range <sup>(1)</sup>	Maximum Zener Impedance <sup>(2)</sup>		Min Reverse Voltage <sup>(1)</sup>
		@I <sub>ZT</sub> =5.0mA V <sub>Z</sub> (V)	Z <sub>ZT</sub> @I <sub>ZT</sub> =5.0mA (Ω)	Z <sub>ZK</sub> @I <sub>ZK</sub> =1.0mA (Ω)	@I <sub>R</sub> =0.1μA V <sub>R</sub> (V)
AZ23C2V7	KD1	2.5-2.9	83	500	-
AZ23C3V0	KD2	2.8-3.2	95	500	-
AZ23C3V3	KD3	3.1-3.5	95	500	-
AZ23C3V6	KD4	3.4-3.8	95	500	-
AZ23C3V9	KD5	3.7-4.1	95	500	-
AZ23C4V3	KD6	4.0-4.6	95	500	-
AZ23C4V7	KD7	4.4-5.0	78	500	-
AZ23C5V1	KD8	4.8-5.4	60	480	0.8
AZ23C5V6	KD9	5.2-6.0	40	400	1.0
AZ23C6V2	KDA	5.8-6.6	10	200	2.0
AZ23C6V8	KDB	6.4-7.2	8.0	150	3.0
AZ23C7V5	KDC	7.0-7.9	7.0	50	5.0
AZ23C8V2	KDD	7.7-8.7	7.0	50	6.0
AZ23C9V1	KDE	8.5-9.6	10	50	7.0
AZ23C10	KDF	9.4-10.6	15	70	7.5
AZ23C11	KDG	10.4-11.6	20	70	8.5
AZ23C12	KDH	11.4-12.7	20	90	9.0
AZ23C13	KDI	12.4-14.1	25	110	10.0
AZ23C15	KDJ	13.8-15.6	30	110	11.0
AZ23C16	KDK	15.3-17.1	40	170	12.0
AZ23C18	KDL	16.8-19.1	50	170	14.0
AZ23C20	KDM	18.8-21.2	50	220	15.0
AZ23C22	KDN	20.8-23.3	55	220	17.0
AZ23C24	KDO	22.8-25.6	80	220	18.0
AZ23C27	KDP	25.1-28.9	80	250	20.0
AZ23C30	KDQ	28-32	80	250	22.5
AZ23C33	KDR	31-35	80	250	25.0
AZ23C36	KDS	34-38	90	250	27.0
AZ23C39	KDT	37-41	90	300	29.0

Note :

1. Short duration test pulse used to minimize self-heating effect.
2. f=1KHz

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FIG.1-ZENER CHARACTERISTICS  
( $V_z$  Up to 10 V)

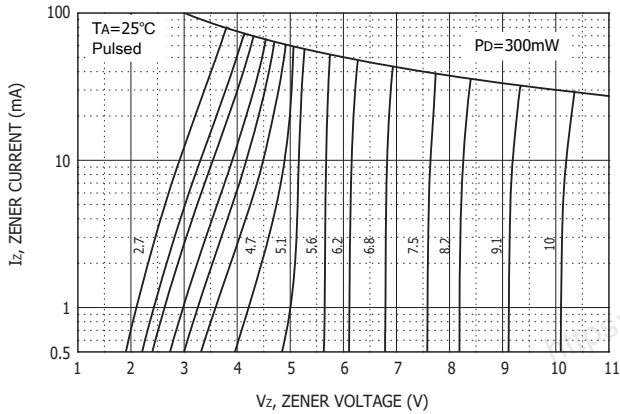


FIG.2-ZENER CHARACTERISTICS  
(11 V to 39 V)

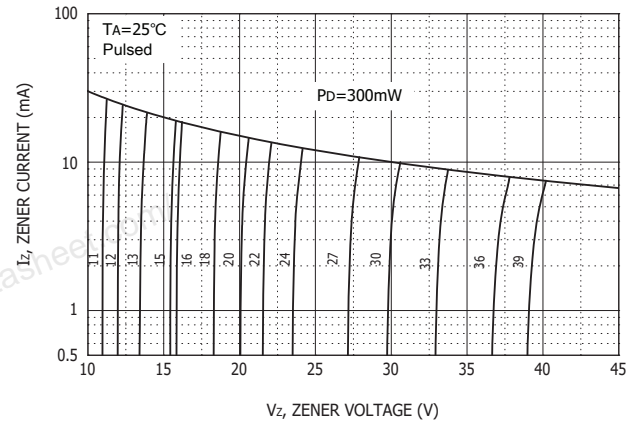


FIG.3-TEMPERATURE COEFFICIENTS

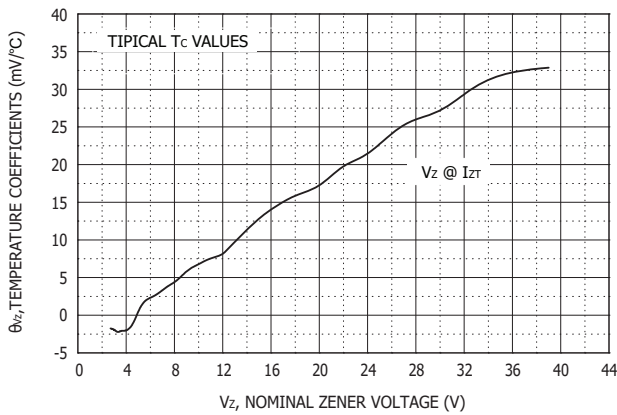


FIG.4-TYPICAL LEAKAGE CURRENT

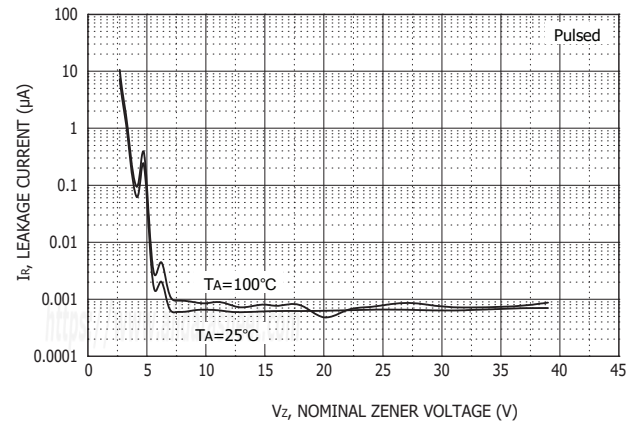


FIG.5-TYPICAL CAPACITANCE

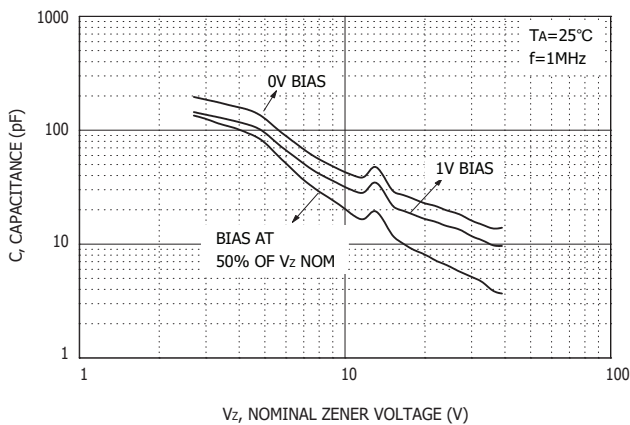


FIG.6-EFFECT OF ZENER VOLTAGE  
ON ZENER IMPEDANCE

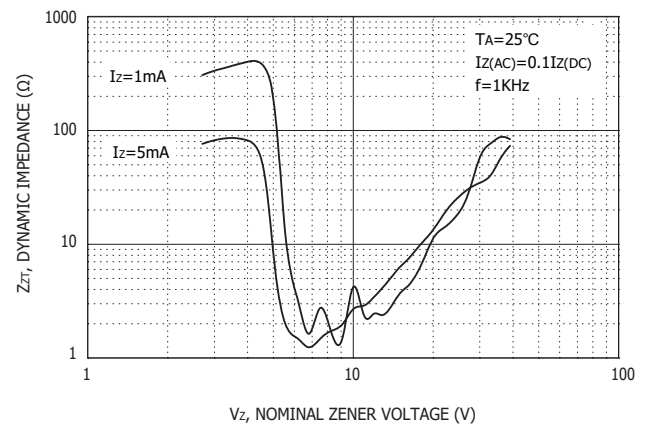
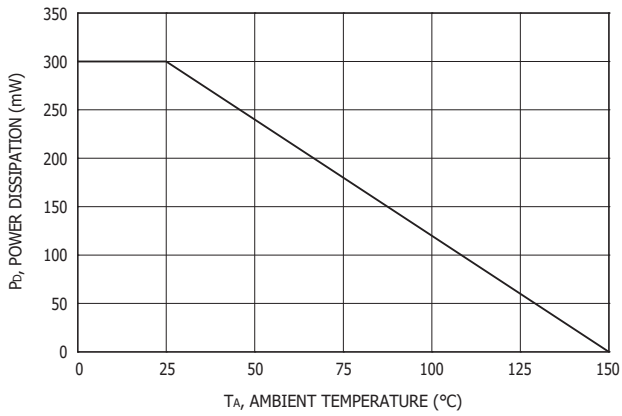


FIG.7-POWER DERATING CURVE



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