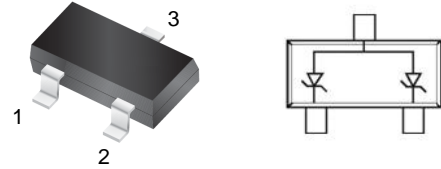


Silicon Planar Zener Diodes in SOT-23

Features

- Planar Die Construction
- 350mW Power Dissipation
- Zener Voltages from 2.4-75V
- Ultra-Small Surface Mount Package Power Dissipation



Mechanical Data

- **Case:** SOT-23 (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage (Note 2) @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation(Note 1)	P_d	350	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	417	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~+150	°C

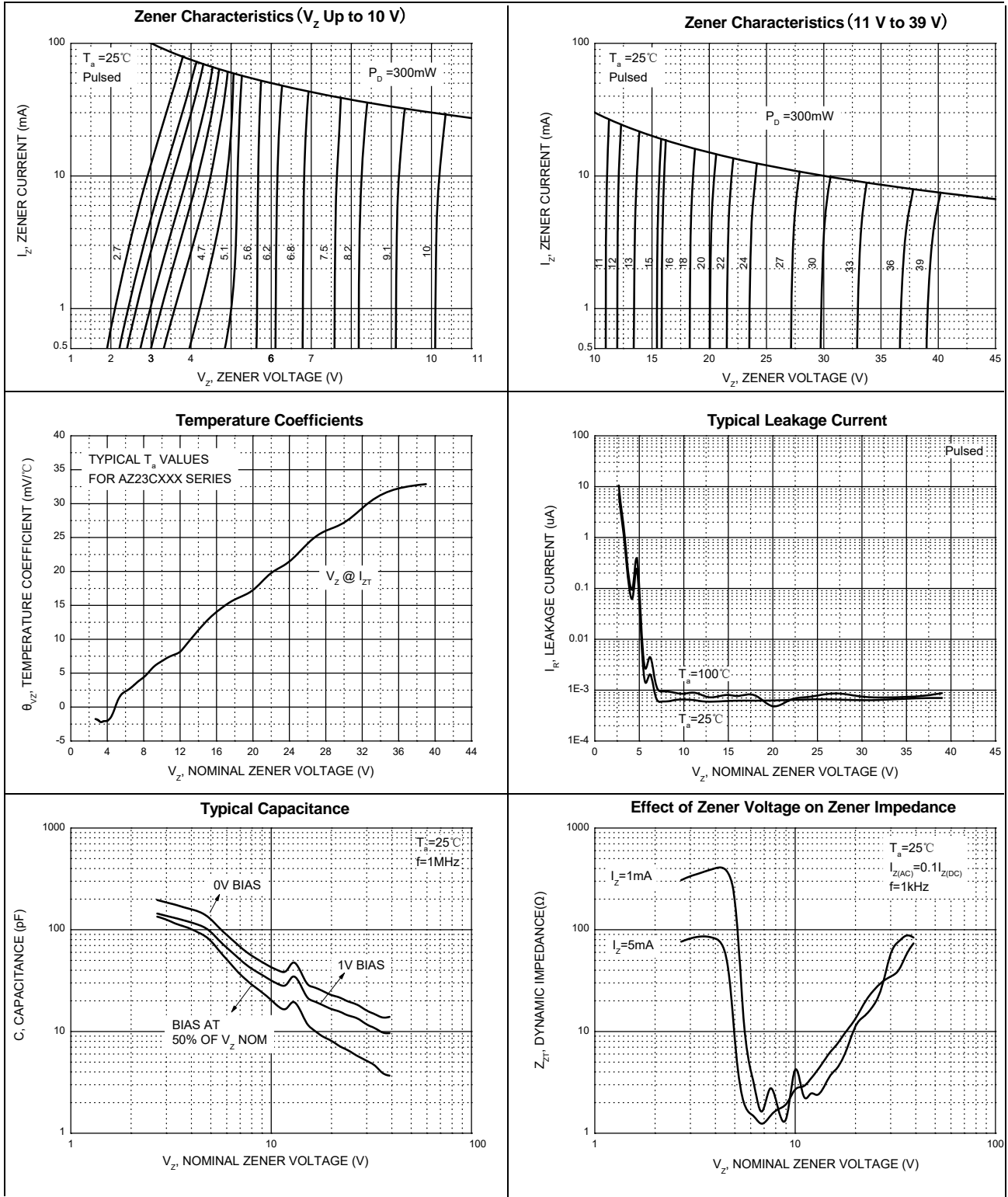
Electrical Characteristics

(T_A = 25 °C unless otherwise specified)

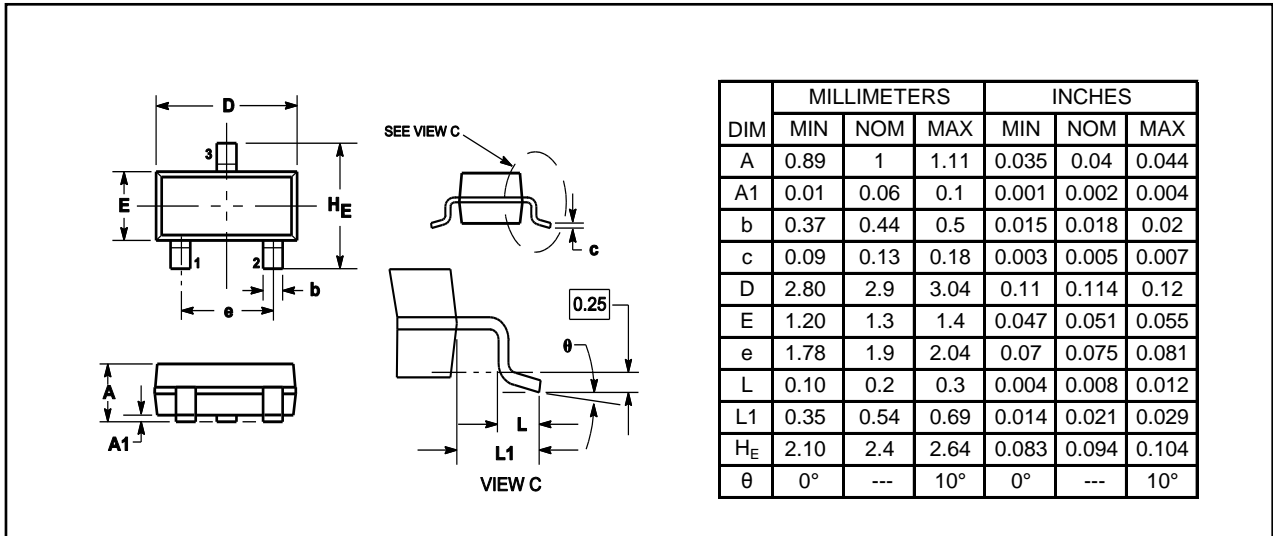
Type Number	Marking Code	Zener voltage Range (note1)	Maximum zener Impedance (note 2)		Typical Temperature coefficient	Min reverse Voltage (note1)
		@ IZT=5.0mA	ZZT@IZT=5.0m A	ZZk@IZk=1.0mA		@IR=0.1 uA
		VZ (volts)	Ohms	Ohms	Tc (%/°C)	VR (volts)
AZ23C2V7	KD1	2.5-2.9	83	500	-0.065	-
AZ23C3V0	KD2	2.8-3.2	95	500	-0.060	-
AZ23C3V3	KD3	3.1-3.5	95	500	-0.055	-
AZ23C3V6	KD4	3.4-3.8	95	500	-0.055	-
AZ23C3V9	KD5	3.7-4.1	95	500	-0.050	-
AZ23C4V3	KD6	4.0-4.6	95	500	-0.035	-
AZ23C4V7	KD7	4.4-5.0	78	500	-0.015	-
AZ23C5V1	KD8	4.8-5.4	60	480	+0.005	0.8
AZ23C5V6	KD9	5.2-6.0	40	400	+0.020	1.0
AZ23C6V2	KDA	5.8-6.6	10	200	+0.030	2.0
AZ23C6V8	KDB	6.4-7.2	8.0	150	+0.045	3.0
AZ23C7V5	KDC	7.0-7.9	7.0	50	+0.050	5.0
AZ23C8V2	KDD	7.7-8.7	7.0	50	+0.055	6.0
AZ23C9V1	KDE	8.5-9.6	10	50	+0.065	7.0
AZ23C10	KDF	9.4-10.6	15	70	+0.065	7.5
AZ23C11	KDG	10.4-11.6	20	70	+0.070	8.5
AZ23C12	KDH	11.4-12.7	20	90	+0.075	9.0
AZ23C13	KDI	12.4-14.1	25	110	+0.080	10.0
AZ23C15	KDJ	13.8-15.6	30	110	+0.080	11.0
AZ23C16	KDK	15.3-17.1	40	170	+0.090	12.0
AZ23C18	KDL	16.8-19.1	50	170	+0.090	14.0
AZ23C20	KDM	18.8-21.2	50	220	+0.090	15.0
AZ23C22	KDN	20.8-23.3	55	220	+0.090	17.0
AZ23C24	KDO	22.8-25.6	80	220	+0.090	18.0
AZ23C27	KDP	25.1-28.9	80	250	+0.090	20.0
AZ23C30	KDQ	28-32	80	250	+0.090	22.5
AZ23C33	KDR	31-35	80	250	+0.090	25.0
AZ23C36	KDS	34-38	90	250	+0.090	27.0
AZ23C39	KDT	37-41	90	300	+0.110	29.0
AZ23C43	D30	40-46	100	700	+0.110	32.0
AZ23C47	D31	44-50	100	750	+0.110	35.0
AZ23C51	D32	48-54	100	750	+0.110	38.0

1) Tested with pulses tp = 20 ms.

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
AZ23C2V7 thur AZ23C51	SOT-23	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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