

# Surface-mount Dual Zener Diode

Voltage range 2.7-51 Volts

300m Watts Power Dissipation

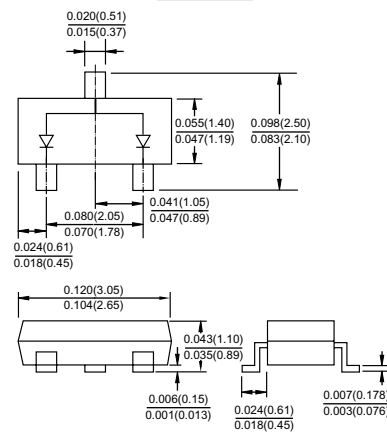
## FEATURES

- Dual zeners in common-anode configuration
- 300 mW power dissipation rating
- Ideally suited for automated insertion
- $\Delta V_z$  for both diodes in common case is  $\leq 5\%$
- Common-cathode style available; see DZ series

## MECHANICAL DATA

- Case: SOT-23, molded plastic
- Terminals: Matte-Sn plated
- Polarity: See diagram
- Marking: Marking code (see table on Page 2)
- Mounting position: Any
- Weight: 0.008 grams (approx.)

### SOT-23



Dimensions in inches and (millimeters)

 **Pb-free, RoHS compliant.**

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

### MAXIMUM RATINGS

Parameter	Symbol	Value	Units
Power Dissipation (Note 1)	P <sub>d</sub>	300	mW
Thermal Resistance Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	420	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to + 150	°C

- Notes: 1. Device on fiberglass substrate.  
 2. Tested with IZT current pulses. Pulse width = 5ms.

**ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)**

Device (Note 1)	Device Marking Code	Zener Voltage Range @ I <sub>z</sub> = 5.0mA V <sub>z</sub> (Volts) (Notes 2)	Maximum Zener Impedance		Typical Temperature Coefficient T <sub>c</sub> (% / °C)	Min Reverse Voltage @ I <sub>R</sub> = 0.1uA V <sub>R</sub> (Volts)
			Z <sub>z</sub> @ I <sub>ZT</sub> = 5.0mA	Z <sub>zK</sub> @ I <sub>ZK</sub> = 1.0mA		
			Ohms	Ohms		
AZ23C2V7	D1	2.5-2.9	83	500	-0.065	-
AZ23C3V0	D2	2.8-3.2	95	500	-0.060	-
AZ23C3V3	D3	3.1-3.5	95	500	-0.055	-
AZ23C3V6	D4	3.4-3.8	95	500	-0.055	-
AZ23C3V9	D5	3.7-4.1	95	500	-0.050	-
AZ23C4V3	D6	4.0-4.6	95	500	-0.035	-
AZ23C4V7	D7	4.4-5.0	78	500	-0.015	-
AZ23C5V1	D8	4.8-5.4	60	480	+0.005	0.8
AZ23C5V6	D9	5.2-6.0	40	400	+0.020	1.0
AZ23C6V2	D10	5.8-6.6	10	200	+0.030	2.0
AZ23C6V8	D11	6.4-7.2	8.0	150	+0.045	3.0
AZ23C7V5	D12	7.0-7.9	7.0	50	+0.050	5.0
AZ23C8V2	D13	7.7-8.7	7.0	50	+0.055	6.0
AZ23C9V1	D14	8.5-9.6	10	50	+0.065	7.0
AZ23C10	D15	9.4-10.6	15	70	+0.065	7.5
AZ23C11	D16	10.4-11.6	20	70	+0.070	8.5
AZ23C12	D17	11.4-12.7	20	90	+0.075	9.0
AZ23C13	D18	12.4-14.1	25	110	+0.080	10.0
AZ23C15	D19	13.8-15.6	30	110	+0.080	11.0
AZ23C16	D20	15.30-17.1	40	170	+0.090	12.0
AZ23C18	D21	16.8-19.1	50	170	+0.090	14.0
AZ23C20	D22	18.8-21.2	50	220	+0.090	15.0
AZ23C22	D23	20.8-23.3	55	220	+0.090	17.0
AZ23C24	D24	22.8-25.6	80	220	+0.090	18.0
AZ23C27	D25	25.1-28.9	80	250	+0.090	20.0
AZ23C30	D26	28-32	80	250	+0.090	22.5
AZ23C33	D27	31-35	80	250	+0.090	25.0
AZ23C36	D28	34-39	90	250	+0.090	27.0
AZ23C39	D29	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

Notes: 1. Device on fiberglass substrate.

2. Tested with I<sub>ZT</sub> current pulses. Pulse width = 5.0ms.

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