



# AZ23C2V7 - AZ23C51

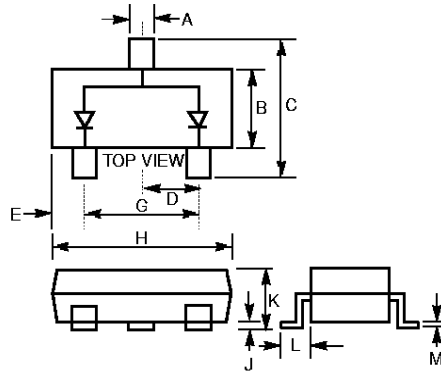
## 300mW DUAL SURFACE MOUNT ZENER DIODES

### Features

- Dual Zeners in Common Anode Configuration
- 300 mW Power Dissipation Rating
- Ideally Suited for Automatic Insertion
- $\Delta V_Z$  For Both Diodes in One Case is  $\leq 5\%$
- Common Cathode Style Available  
See DZ Series

### Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Marking: Marking Code (See Table on Page 2)
- Approx. Weight: 0.008 grams
- Mounting Position: Any



SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178
All Dimensions in mm		

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	$P_d$	300	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	420	K/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150	$^\circ\text{C}$

# Electrical Characteristics

@T<sub>A</sub> = 25 °C unless otherwise specified

Type Number	Marking Code	Zener Voltage Range (Note 2)	Maximum Zener Impedance		Typical Temperature Coefficient	Min. Reverse Voltage
			@ I <sub>ZT</sub> = 5.0mA	Z <sub>ZT</sub> @ I <sub>ZT</sub> = 5.0mA		
		V <sub>Z</sub> (Volts)	Ohms	Ohms	T <sub>C</sub> (%/°C)	@ I <sub>R</sub> = 0.1μA V <sub>R</sub> (Volts)
AZ23C2V7	D1/KD1	2.5-2.9	83	500	-0.065	—
AZ23C3V0	D2/KD2	2.8-3.2	95	500	-0.060	—
AZ23C3V3	D3/KD3	3.1-3.5	95	500	-0.055	—
AZ23C3V6	D4/KD4	3.4-3.8	95	500	-0.055	—
AZ23C3V9	D5/KD5	3.7-4.1	95	500	-0.050	—
AZ23C4V3	D6/KD6	4.0-4.6	95	500	-0.035	—
AZ23C4V7	D7/KD7	4.4-5.0	78	500	-0.015	—
AZ23C5V1	D8/KD8	4.8-5.4	60	480	+0.005	0.8
AZ23C5V6	D9/KD9	5.2-6.0	40	400	+0.020	1.0
AZ23C6V2	D10/KDA	5.8-6.6	10	200	+0.030	2.0
AZ23C6V8	D11/KDB	6.4-7.2	8.0	150	+0.045	3.0
AZ23C7V5	D12/KDC	7.0-7.9	7.0	50	+0.050	5.0
AZ23C8V2	D13/KDD	7.7-8.7	7.0	50	+0.055	6.0
AZ23C9V1	D14/KDE	8.5-9.6	10	50	+0.065	7.0
AZ23C10	D15/KDF	9.4-10.6	15	70	+0.065	7.5
AZ23C11	D16/KDG	10.4-11.6	20	70	+0.070	8.5
AZ23C12	D17/KDH	11.4-12.7	20	90	+0.075	9.0
AZ23C13	D18/KDI	12.4-14.1	25	110	+0.080	10.0
AZ23C15	D19/KDJ	13.8-15.6	30	110	+0.080	11.0
AZ23C16	D20/KDK	15.3-17.1	40	170	+0.090	12.0
AZ23C18	D21/KDL	16.8-19.1	50	170	+0.090	14.0
AZ23C20	D22/KDM	18.8-21.2	50	220	+0.090	15.0
AZ23C22	D23/KDN	20.8-23.3	55	220	+0.090	17.0
AZ23C24	D24/KDO	22.8-25.6	80	220	+0.090	18.0
AZ23C27	D25/KDP	25.1-28.9	80	250	+0.090	20.0
AZ23C30	D26/KDQ	28-32	80	250	+0.090	22.5
AZ23C33	D27/KDR	31-35	80	250	+0.090	25.0
AZ23C36	D28/KDS	34-38	90	250	+0.090	27.0
AZ23C39	D29/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

Notes: 1. Device on Fiberglass Substrate.  
2. Tested with I<sub>ZT</sub> current pulses. Pulse width = 5.0ms.