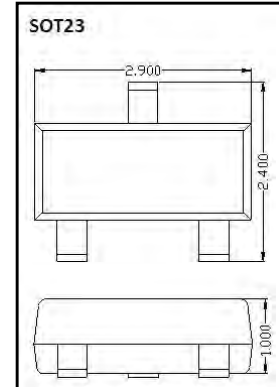
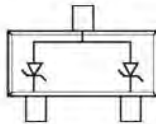


### Zener Diode

- ◇ Planar Die construction
- ◇ 300mW Power Dissipation
- ◇ Zener Voltages from 2.7V-51V
- ◇ RoHS compliant / Green EMC
- ◇ Vz for both diodes in one case is ≤5%.

\*Pin Configuration - Top View



### MAXIMUM RATINGS (Ta = 25 °C)

Symbol	Parameter	Value	Units
VF	Maximum Forward Voltage @ IF=10mA	0.9	V
P(AV)	Power Dissipation	300	mW
Tj, Tstg	Operating And Storage Temperature	-55 to 150	°C
Tstg	Storage Temperature Rance	-55 to 150	°C
Rj	Thermal Resistance Junction to Ambient	417	°C/W

### ELECTRICAL CHARACTERISTICS (Ta = 25 °C unless otherwise noted)

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 =5.0mA	ZZk@IZk =1.0mA		@IR=0.1uA
		VZ (volts )	Ohms	Ohms		VR (volts)
AZ23C2V7	KD1	2.5-2.9	83	500	-0.065	-



## AZ23C2V7 ~ AZ23C51

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



Curve Characteristics

Fig. 1 - Power Derating Curve

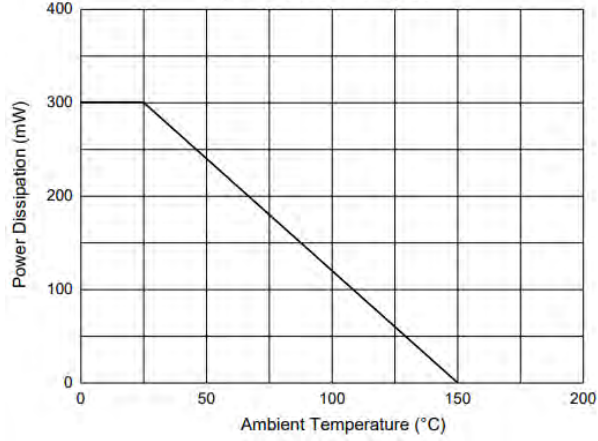


Fig. 2 - Typical Zener Breakdown Characteristics

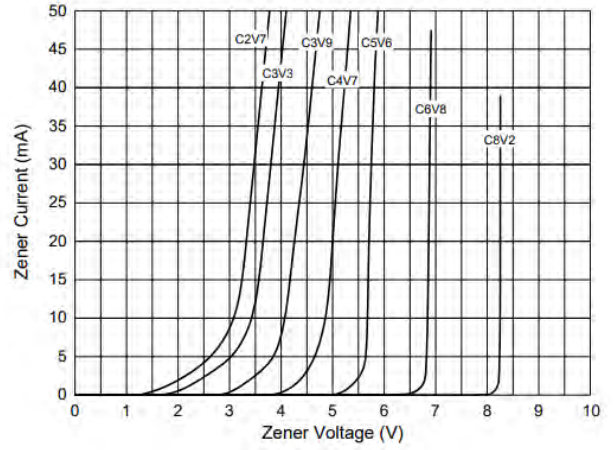
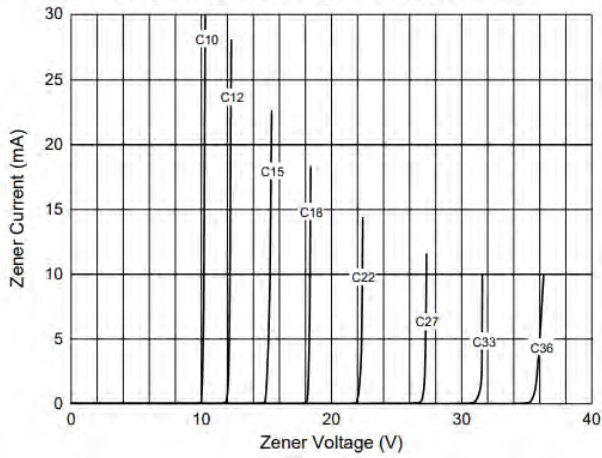


Fig. 3 - Typical Zener Breakdown Characteristics



## ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
AZ23C2V7- AZ23C51	SOT23	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

## PACKAGE DIMENSIONS

**Package Outline : SOT23**

Symbol	Dimensions in mm	
	Min.	Max.
A	2.800	3.040
B	2.100	2.640
C	1.200	1.400
D	0.890	1.030
E	1.780	2.050
F	0.450	0.600
G	0.013	0.100
H	0.900	1.110
J	0.090	0.180
K	0.370	0.510

**SOT23 Package Outline**

**Note:**  
 1. Halogen free ,EMC  
 2. Pb free solder  
 3. Lead thickness solder plating  
 4. Lead frame CAC-5  
 5. Other Tolerance  $\pm 0.05$   
 6. Dimensions are exclusive of Burrs Mold Flash and Tie Bar extrusions  
 7. Unit : mm