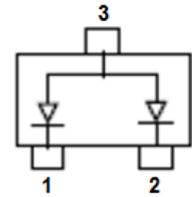


Features

- Large Selection of Zener Voltages: 2.4V - 51V
- Tight Voltage Tolerance: $\pm 5\%$
- MSL Class 1 Compatible

Applications

- General Voltage Regulation
- Mobile & Handheld Systems



Schematic Diagram

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Max.	Unit
Power Dissipation	P _D	300	mW
Thermal Resistance, Junction-to-Ambient	R _{θJA}	417	°C/W
Operating Junction Temperature Range	T _J	-55 To +150	°C
Storage Temperature Range	T _{STG}	-65 To +150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Part Number	Marking Code	Zener Voltage V _Z (V)			@ I _{ZT} (mA)	Maximum Zener Impedance			Typical Temperature Coefficient	Maximum Reverse Current	@ V _R (V)
		Min.	Typ.	Max.		Z _{ZT} (Ω)	Z _{ZK} (Ω)	@ I _{ZK} (mA)			
						@ I _{ZT}					
GSAZ23C2V4	KD0	2.28	2.40	2.52	5	85	600	1	-0.065	100.00	1.0
GSAZ23C2V7	KD1	2.57	2.70	2.84	5	83	600	1	-0.065	75.00	1.0
GSAZ23C3V0	KD2	2.85	3.00	3.15	5	95	600	1	-0.060	50.00	1.0
GSAZ23C3V3	KD3	3.14	3.30	3.47	5	95	600	1	-0.055	25.00	1.0
GSAZ23C3V6	KD4	3.42	3.60	3.78	5	95	600	1	-0.055	15.00	1.0
GSAZ23C3V9	KD5	3.71	3.90	4.10	5	95	600	1	-0.050	10.00	1.0
GSAZ23C4V3	KD6	4.09	4.30	4.52	5	95	600	1	-0.035	5.00	1.0
GSAZ23C4V7	KD7	4.47	4.70	4.94	5	78	500	1	-0.015	5.00	2.0
GSAZ23C5V1	KD8	4.85	5.10	5.36	5	60	480	1	0.005	0.10	0.8
GSAZ23C5V6	KD9	5.32	5.60	5.88	5	40	400	1	0.020	0.10	1.0
GSAZ23C6V2	KDA	5.89	6.20	6.51	5	10	200	1	0.030	0.10	2.0

Electrical Characteristics (T_A=25°C unless otherwise noted)

Part Number	Marking Code	Zener Voltage V _z (V)			@ I _{ZT} (mA)	Maximum Zener Impedance			Typical Temperature Coefficient	Maximum Reverse Current	@ V _R (V)
		Min.	Typ.	Max.		Z _{ZT} (Ω)	Z _{ZK} (Ω)	@ I _{ZK} (mA)			
						@ I _{ZT}					
GSAZ23C6V8	KDB	6.46	6.80	7.14	5	8	150	1	0.045	0.10	3.0
GSAZ23C7V5	KDC	7.13	7.50	7.88	5	7	50	1	0.050	0.10	5.0
GSAZ23C8V2	KDD	7.79	8.20	8.61	5	7	50	1	0.055	0.10	6.0
GSAZ23C9V1	KDE	8.65	9.10	9.56	5	10	50	1	0.065	0.10	7.0
GSAZ23C10	KDF	9.50	10.00	10.50	5	15	70	1	0.065	0.10	7.5
GSAZ23C11	KDG	10.45	11.00	11.55	5	20	70	1	0.070	0.10	8.5
GSAZ23C12	KDH	11.40	12.00	12.60	5	20	90	1	0.075	0.10	9.0
GSAZ23C13	KDI	12.35	13.00	13.65	5	25	110	1	0.080	0.10	10.0
GSAZ23C15	KDJ	14.25	15.00	15.75	5	30	110	1	0.080	0.10	11.0
GSAZ23C16	KDK	15.20	16.00	16.80	5	40	170	1	0.090	0.10	12.0
GSAZ23C18	KDL	17.10	18.00	18.90	5	50	170	1	0.090	0.10	14.0
GSAZ23C20	KDM	19.00	20.00	21.00	5	50	220	1	0.090	0.10	15.0
GSAZ23C22	KDN	20.90	22.00	23.10	5	55	220	1	0.090	0.10	17.0
GSAZ23C24	KDO	22.80	24.00	25.20	5	80	220	1	0.090	0.10	18.0
GSAZ23C27	KDP	25.65	27.00	28.35	5	80	250	1	0.090	0.10	20.0
GSAZ23C30	KDQ	28.50	30.00	31.50	5	80	250	1	0.090	0.10	22.5
GSAZ23C33	KDR	31.35	33.00	34.65	5	80	250	1	0.090	0.10	25.0
GSAZ23C36	KDS	34.20	36.00	37.80	5	90	250	1	0.090	0.10	27.0
GSAZ23C39	KDT	37.05	39.00	40.95	5	90	300	1	0.110	0.10	29.0
GSAZ23C43	KDU	40.85	43.00	45.15	5	100	700	1	0.110	0.10	32.0
GSAZ23C47	KDV	44.65	47.00	49.35	5	100	750	1	0.110	0.10	35.0
GSAZ23C51	KDW	48.45	51.00	53.55	5	100	750	1	0.100	0.10	38.0

Typical Characteristic Curves (T_A=25°C unless otherwise noted)

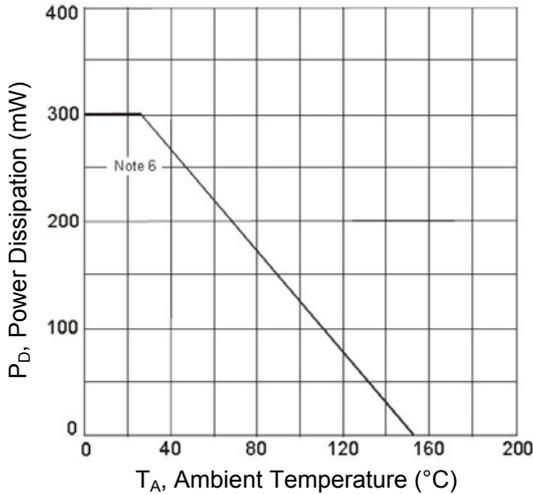


Figure 1. Power Dissipation vs Ambient Temperature

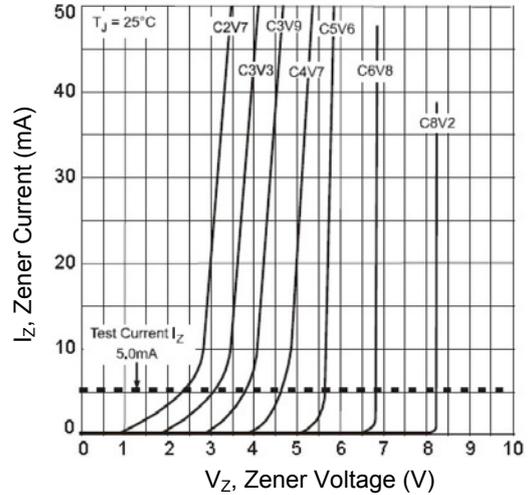


Figure 2. Typical Zener Breakdown Characteristics

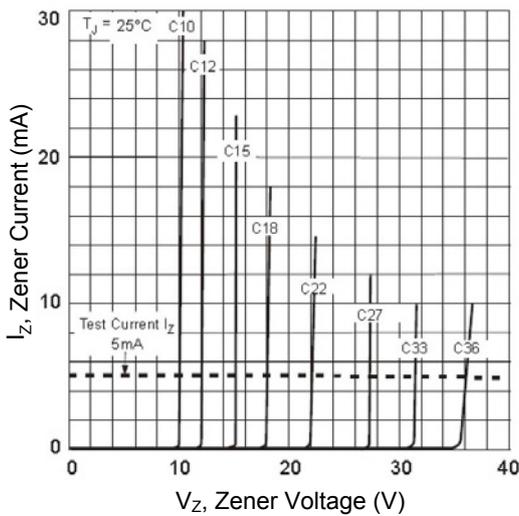


Figure 3. Typical Zener Breakdown Characteristics

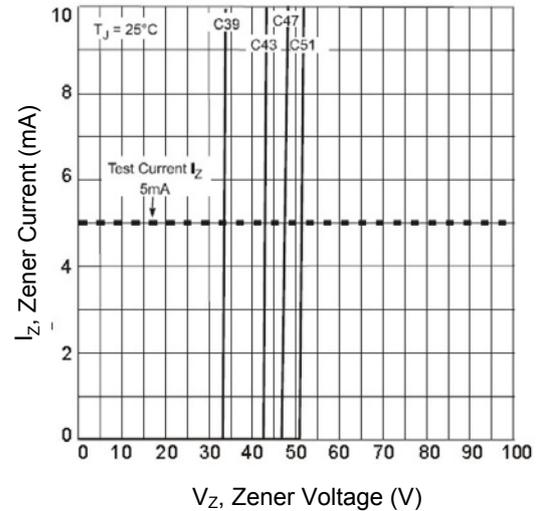
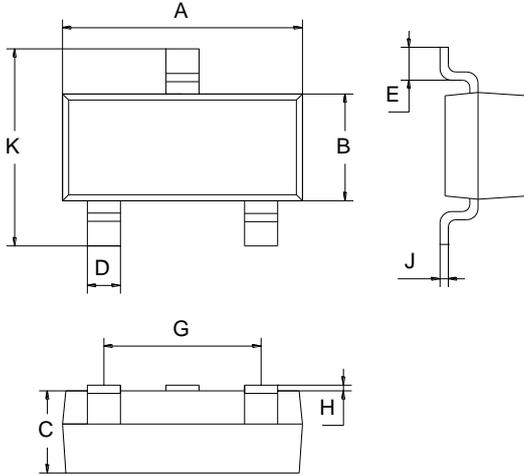


Figure 4. Typical Zener Breakdown Characteristics

Package Outline Dimensions SOT-23



Symbol	Dimensions in Millimeters	
	Max	Min
A	3.100	2.700
B	1.500	1.100
C	1.100	0.900
D	0.500	0.300
E	0.480	0.350
G	2.000	1.800
H	0.100	0.020
J	0.150	0.050
K	2.600	2.200

Recommended Pad Layout (Unit: mm)

