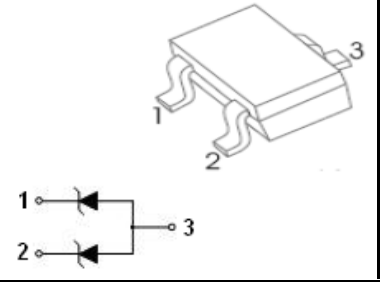


SOT-323 Plastic-Encapsulate Diodes**AZ23C2V7W-AZ23C39W****Zener Diodes****SOT-323****FEATURES**

- Zener Voltages From 2.7V - 39V
- 200mW Power Dissipation
- Planar Die Construction

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

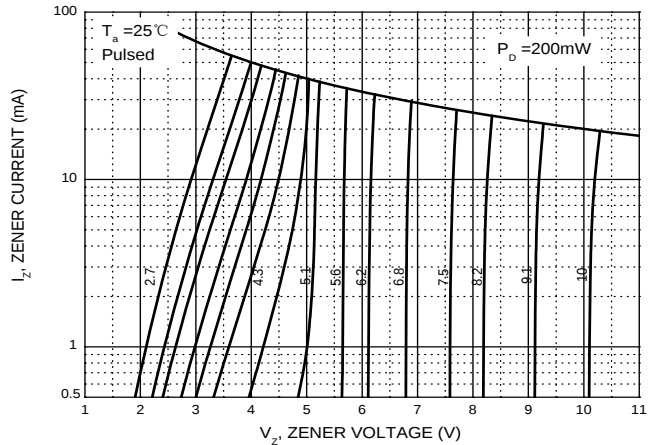
Characteristic	Symbol	Value	Unit
Forward Voltage @ $I_F = 10\text{mA}$	V_F	0.9	V
Power Dissipation	P_d	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	$^{\circ}\text{C/W}$
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

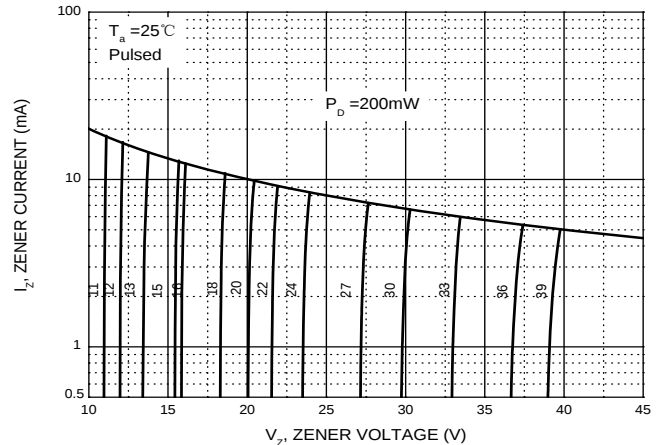
Type Number	Marking Code	Zener Voltage Range	Maximum Zener Impedance		Typical Temperature Coefficient	Min Reverse Voltage
		@ $I_{ZT}=5.0\text{mA}$	$Z_{ZT}@I_{ZT}=5.0\text{mA}$	$Z_{Zk}@I_{Zk}=1.0\text{mA}$		@ $I_R=0.1\text{A}$
		V_Z (V)	Ω	Ω		V_R (V)
AZ23C2V7W	KD1	2.5-2.9	83	500	-0.065	—
AZ23C3V0W	KD2	2.8-3.2	95	500	-0.060	—
AZ23C3V3W	KD3	3.1-3.5	95	500	-0.055	—
AZ23C3V6W	KD4	3.4-3.8	95	500	-0.055	—
AZ23C3V9W	KD5	3.7-4.1	95	500	-0.050	—
AZ23C4V3W	KD6	4.0-4.6	95	500	-0.035	—
AZ23C4V7W	KD7	4.4-5.0	78	500	-0.015	—
AZ23C5V1W	KD8	4.8-5.4	60	480	+0.005	0.8
AZ23C5V6W	KD9	5.2-6.0	40	400	+0.020	1.0
AZ23C6V2W	KDA	5.8-6.6	10	200	+0.030	2.0
AZ23C6V8W	KDB	6.4-7.2	8.0	150	+0.045	3.0
AZ23C7V5W	KDC	7.0-7.9	7.0	50	+0.050	5.0
AZ23C8V2W	KDD	7.7-8.7	7.0	50	+0.055	6.0
AZ23C9V1W	KDE	8.5-9.6	10	50	+0.065	7.0
AZ23C10W	KDF	9.4-10.6	15	70	+0.065	7.5
AZ23C11W	KDG	10.4-11.6	20	70	+0.070	8.5
AZ23C12W	KDH	11.4-12.7	20	90	+0.075	9.0
AZ23C13W	KDI	12.4-14.1	25	110	+0.080	10.0
AZ23C15W	KDJ	13.8-15.6	30	110	+0.080	11.0
AZ23C16W	KDK	15.3-17.1	40	170	+0.090	12.0
AZ23C18W	KDL	16.8-19.1	50	170	+0.090	14.0
AZ23C20W	KDM	18.8-21.2	50	220	+0.090	15.0
AZ23C22W	KDN	20.8-23.3	55	220	+0.090	17.0
AZ23C24W	KDO	22.8-25.6	80	220	+0.090	18.0
AZ23C27W	KDP	25.1-28.9	80	250	+0.090	20.0
AZ23C30W	KDQ	28-32	80	250	+0.090	22.5
AZ23C33W	KDR	31-35	80	250	+0.090	25.0
AZ23C36W	KDS	34-38	90	250	+0.090	27.0
AZ23C39W	KDT	37-41	90	300	+0.110	29.0

Typical Characteristics

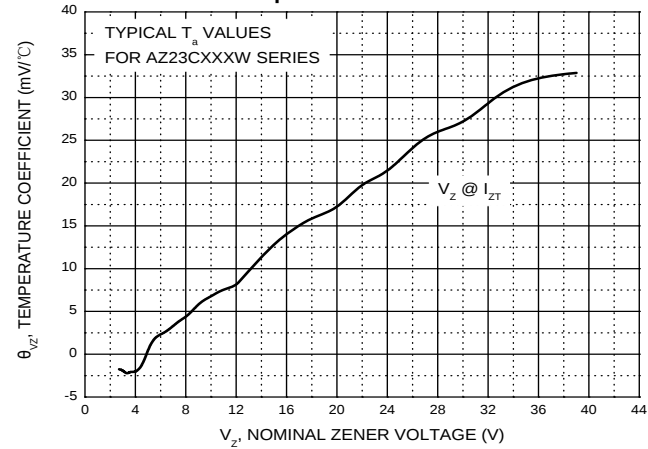
Zener Characteristics (V_Z Up to 10 V)



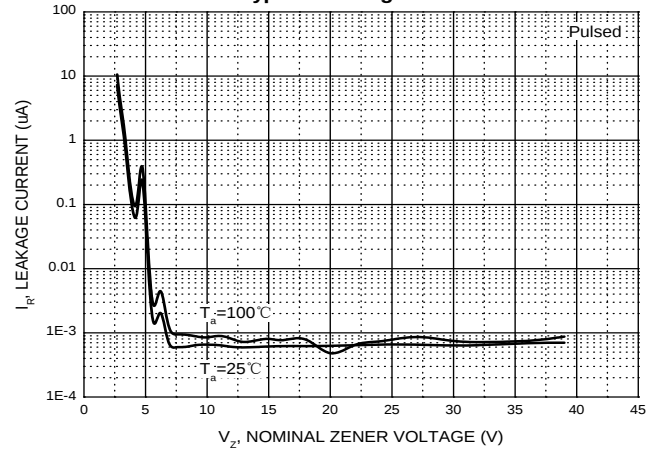
Zener Characteristics (11 V to 43 V)



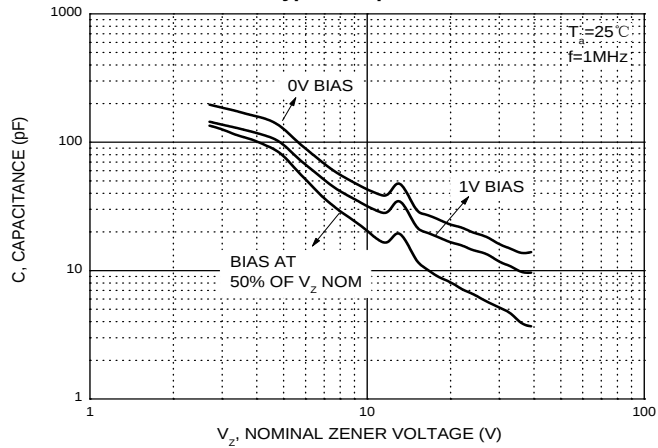
Temperature Coefficients



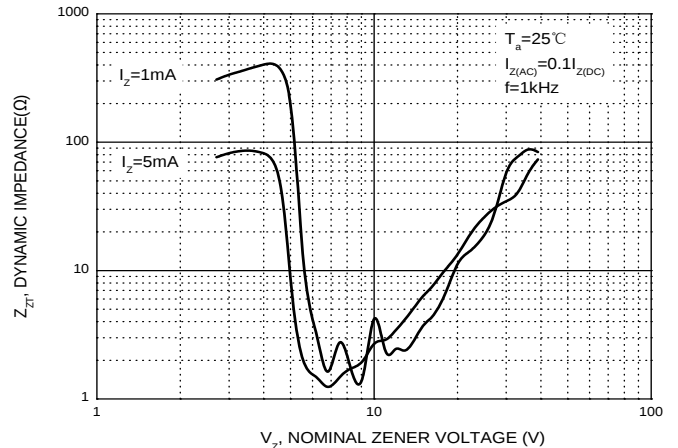
Typical Leakage Current



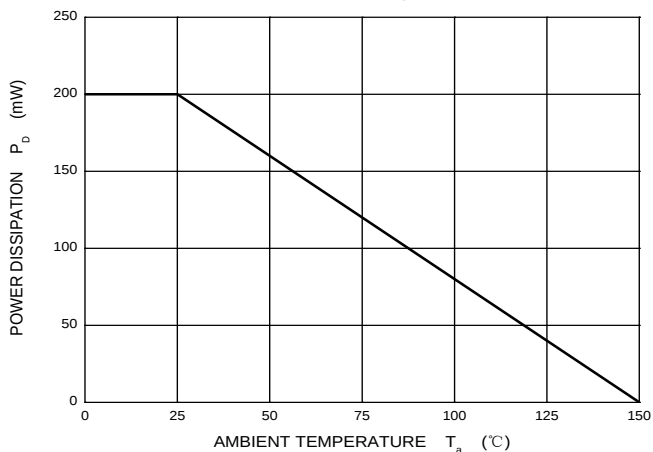
Typical Capacitance



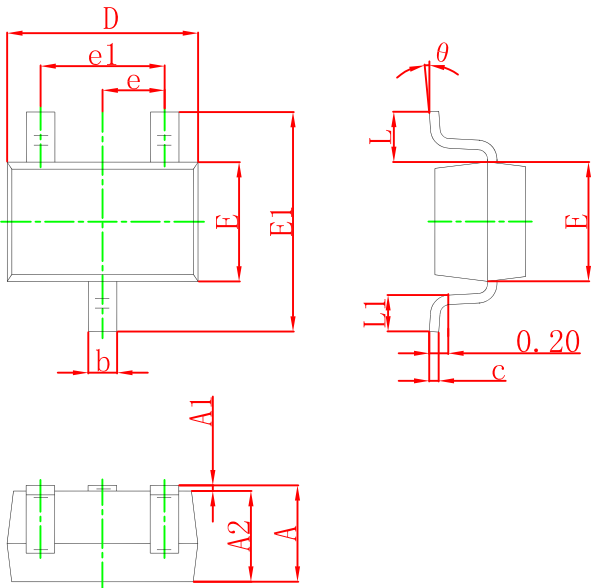
Effect of Zener Voltage on Zener Impedance



Power Derating Curve

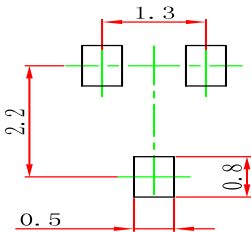


Package Outline Dimensions (SOT-323)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout (SOT-323)



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.