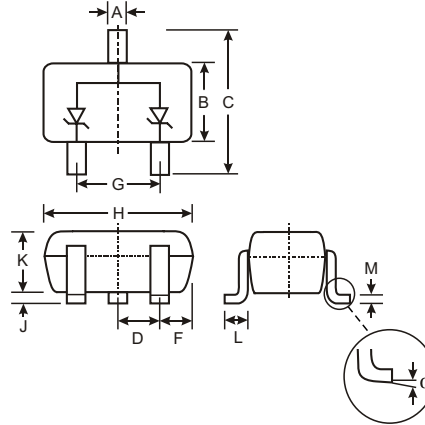


Features

- Nominal Zener Voltages: 5.6V, 6.8V, 10V, 18V
- Ultra-Small Surface Mount Package
- Ideal For Transient Suppression
- Available in Lead Free/RoHS Compliant Version (Note 4)

Mechanical Data

- Case: SOT-323
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminal Connections: See Diagram
- Also Available in Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe). Please see Ordering Information, Note 6, on Page 2
- Marking: See Below & Page 2
- Ordering Information: See Page 2
- Weight: 0.006 grams (approximate)



SOT-323		
Dim	Min	Max
A	0.25	0.40
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
E	0.30	0.40
G	1.20	1.40
H	1.80	2.20
J	0.0	0.10
K	0.90	1.00
L	0.25	0.40
M	0.10	0.18
α	0°	8°
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage @ I _F = 10mA	V _F	0.9	V
Power Dissipation (Note 1)	P _d	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	625	°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	°C

Type Number	Marking Code	Zener Voltage Range (Note 2)			Maximum Zener Impedance (Note 3)				Maximum Reverse Current (Note 2)		Temperature Coefficient of Zener Voltage @ I _{ZT} = 5mA	
		V _Z @ I _{ZT}			Z _{ZT} @ I _{ZT}		Z _{ZK} @ I _{ZK}		I _R @ V _R		T _C (mV/°C)	
		Nom (V)	Min (V)	Max (V)	Ω	mA	Ω	mA	μA	V	Min	Max
AZ23C5V6W	KD9	5.6	5.32	5.88	40	5.0	400	1.0	1.0	2.0	-2.0	2.5
AZ23C6V8W	KDB	6.8	6.47	7.14	15	5.0	80	1.0	2.0	4.0	1.2	4.5
AZ23C10W	KDF	10	9.4	10.6	15	5.0	70	1.0	0.2	7.0	4.5	8.0
AZ23C18W	KDL	18	16.8	19.1	50	5.0	170	1.0	0.1	12.6	12.4	16.0

- Notes:
- Mounted on FR4 PC Board with recommended pad layout at <http://www.diodes.com/datasheets/ap02001.pdf>.
 - Short duration pulse test used so as not to induce significant self-heating.
 - f = 1KHz.
 - No purposefully added lead.

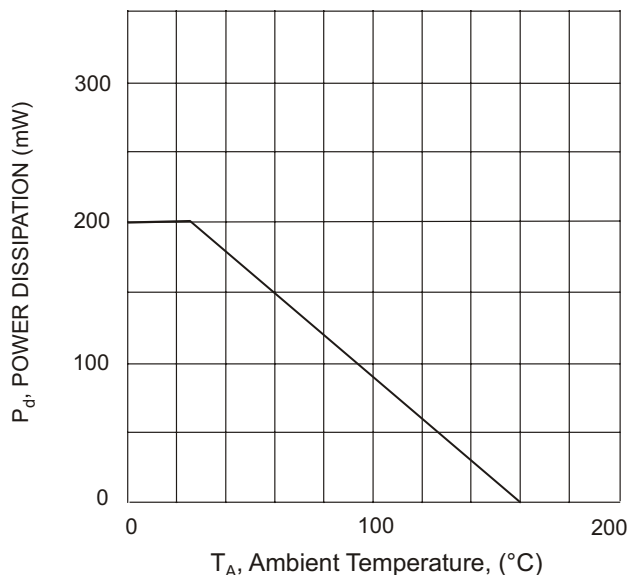


Fig. 1 Power Derating Curve

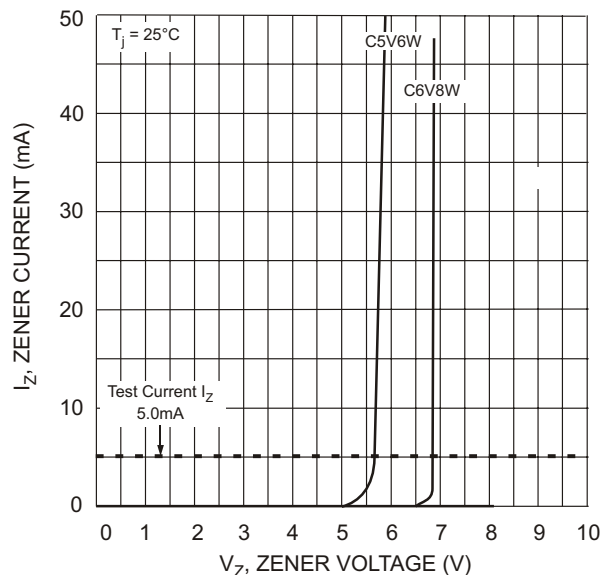


Fig. 2 Zener Breakdown Characteristics

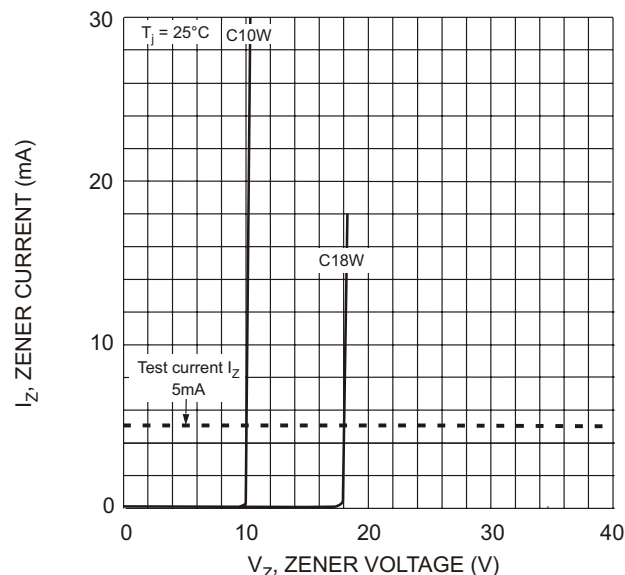


Fig. 3 Zener Breakdown Characteristics

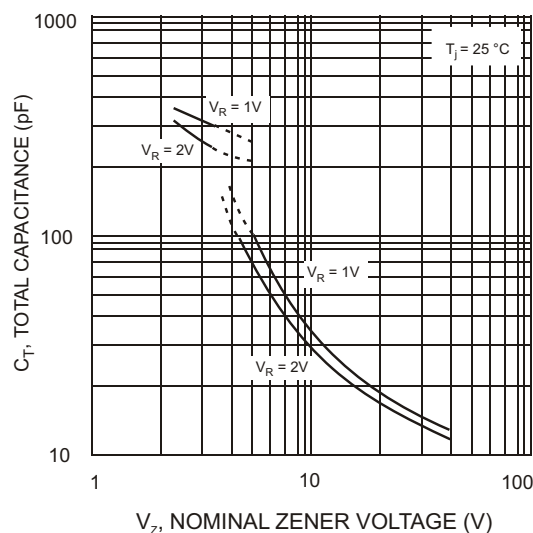


Fig. 4 Total Capacitance vs Nominal Zener Voltage

Ordering Information (Note 5)

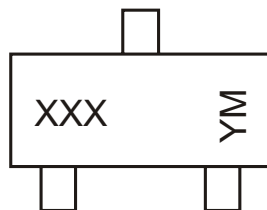
Device	Packaging	Shipping
(Type Number)-7*	SOT-323	3000/Tape & Reel

* Add "-7" to the appropriate type number in Table 1 from Page 2 example: 6.8V Zener = AZ23C6V8W-7.

Notes: 5. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

6. For Lead Free/RoHS Compliant Version part number, please add "-F" suffix to the part number above. Example: AZ23C5V6W-7-F.

Marking Information



XXX = Product Type Marking Code (See Table)
YM = Date Code Marking
Y = Year ex: N = 2002
M = Month ex: 9 = September

Date Code Key

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Code	J	K	L	M	N	P	R	S	T	U	V	W

Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D