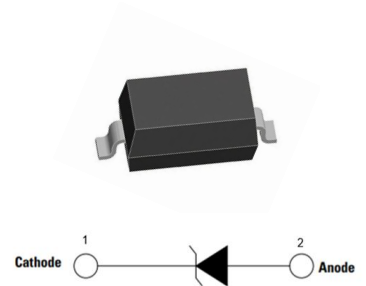


Features

- ◆ For surface mounted applications to optimize board space
- ◆ 200mw Power Dissipation
- ◆ Zener Breakdown Voltage Range 2.0V to 47V
- ◆ High Temperature soldering guaranteed: 260°C/40 seconds at terminals
- ◆ Plastic package has underwriters laboratory flammability 94V-0
- ◆ Meets MSL level 1, per J-STD-020.
- ◆ Meet Halogen free and RoHS compliant
- ◆ Terminals: Solderable per MIL-STD-202, Method 208
- ◆ Polarity: Cathode Indicated by Polarity Band
- ◆ SOD-323 package
- ◆ Weight: 0.0049grams(approximate)



Dimensions (SOD-323)

Symbol	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.80	1.00	0.031	0.040
A1	0.00	0.10	0.000	0.004
b	0.25	0.4	0.012	0.016
C	0.089	0.177	0.005	0.007
D	1.60	1.80	0.066	0.070
E	1.15	1.35	0.049	0.053
HE	2.30	2.70	0.098	0.105
L	0.08	--	0.003	--

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

Characteristics	Symbol	Value	Unit
Total Power Dissipation on FR-5 Board(Note1)	P _D	200	mW
Thermal Resistance Junction to Ambient Air(Note1)	R _{θJA}	625	°C/W
Forward Voltage @ I _F = 10 mA	V _F	0.9	V
Junction and Storage Temperature Range	T _J ,T _{STG}	-65 to +150	°C

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

Part Number	Zener Voltage(1)				Maximum Zener Impedance(3)			Maximum Reverse Current		Typical Temperature Coefficient @I _{ZT} mV/ °C	
	V _Z @ I _{ZT}			@ I _{ZT}	Z _{ZT} @I _{ZT}	Z _{ZK} @I _{ZK}	I _{zk}	I _R	@ V _R		
	Nom(V)	Min(V)	Max (V)	mA	Ω		mA	μA	V	Min	Max
ZD323A2V0S	2.0	1.91	2.09	5	100	600	1.0	150	1.0	-3.5	0
ZD323A2V4S	2.4	2.20	2.60	5	100	600	1.0	50	1.0	-3.5	0
ZD323A2V7S	2.7	2.5	2.9	5	100	600	1.0	20	1.0	-3.5	0
ZD323A3V0S	3.0	2.8	3.2	5	95	600	1.0	10	1.0	-3.5	0
ZD323A3V3S	3.3	3.1	3.5	5	95	600	1.0	5	1.0	-3.5	0
ZD323A3V6S	3.6	3.4	3.8	5	90	600	1.0	5	1.0	-3.5	0
ZD323A3V9S	3.9	3.7	4.1	5	90	600	1.0	3	1.0	-3.5	0
ZD323A4V3S	4.3	4.0	4.6	5	90	600	1.0	3	1.0	-3.5	0
ZD323A4V7S	4.7	4.4	5.0	5	80	500	1.0	2	2.0	-3.5	0.2
ZD323A5V1S	5.1	4.8	5.4	5	60	480	1.0	1	2.0	-2.7	1.2
ZD323A5V6S	5.6	5.2	6.0	5	40	400	1.0	3	2.0	-2.0	2.5
ZD323A6V2S	6.2	5.8	6.6	5	10	150	1.0	2	4.0	0.4	3.7
ZD323A6V8S	6.8	6.4	7.2	5	15	80	1.0	1	4.0	1.2	4.5
ZD323A7V5S	7.5	7.0	7.9	5	15	80	1.0	0.7	5.0	2.5	5.3
ZD323A8V2S	8.2	7.7	8.7	5	15	80	1.0	0.5	5.0	3.2	6.2
ZD323A9V1S	9.1	8.5	9.6	5	15	100	1.0	0.2	6.0	3.8	7.0
ZD323A10S	10	9.4	10.6	5	20	150	1.0	0.1	7.0	4.5	8.0
ZD323A11S	11	10.4	11.6	5	20	150	1.0	0.1	8.0	5.4	9.0
ZD323A12S	12	11.4	12.7	5	25	150	1.0	0.1	8.0	6.0	10.0
ZD323A13S	13	12.4	14.1	5	30	170	1.0	0.1	8.0	7.0	11.0
ZD323A15S	15	13.8	15.6	5	30	200	1.0	0.1	10.5	9.2	13.0
ZD323A16S	16	15.3	17.1	5	40	200	1.0	0.1	11.2	10.4	-
ZD323A18S	18	16.8	19.1	5	45	225	1.0	0.1	12.6	12.4	-
ZD323A20S	20	18.8	21.2	5	55	225	1.0	0.1	14.0	14.4	-
ZD323A22S	22	20.8	23.3	5	55	250	1.0	0.1	15.4	16.4	-
ZD323A24S	24	22.8	25.6	5	70	250	1.0	0.1	16.8	18.4	-
ZD323A27S	27	25.1	28.9	2	80	300	0.5	0.1	18.9	21.4	-
ZD323A30S	30	28.0	32.0	2	80	300	0.5	0.1	21.0	24.4	-
ZD323A33S	33	31.0	35.0	2	80	325	0.5	0.1	23.1	27.4	-
ZD323A36S	36	34.0	38.0	2	90	350	0.5	0.1	25.2	30.4	-
ZD323A39S	39	37.0	41.0	2	90	350	0.5	0.1	27.3	33.4	-
ZD323A43S	43	41.0	45.0	2	100	375	1	0.1	32.0	37.4	-
ZD323A47S	47	45.0	49.0	2	100	375	1	0.1	35.0	41.4	-

Notes:

1. Tested with pulses, period = 5ms, pulse width = 300μs.
2. When provided, otherwise, parts are provided with date code only, and type number identifications appears on reel only.
3. f=1KHz.

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

Figure 1. Power Derating Curve

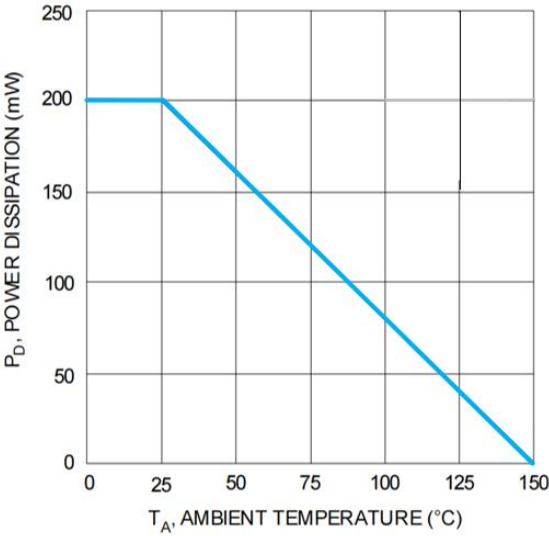


Figure 2. Typical Zener Breakdown Characteristics

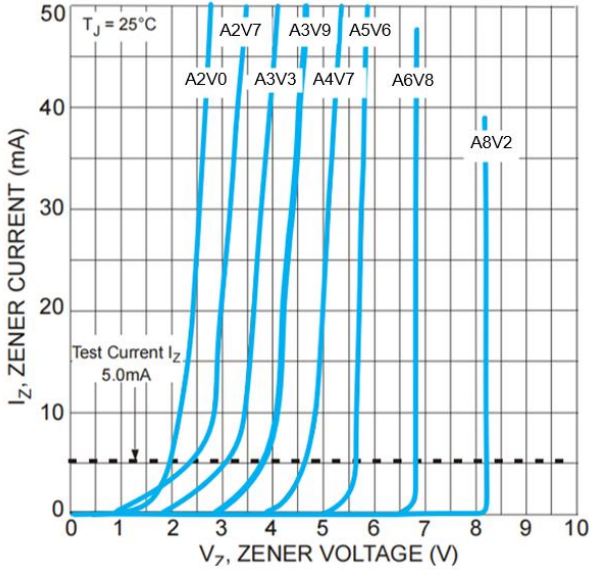


Figure 3. Typical Zener Breakdown Characteristics

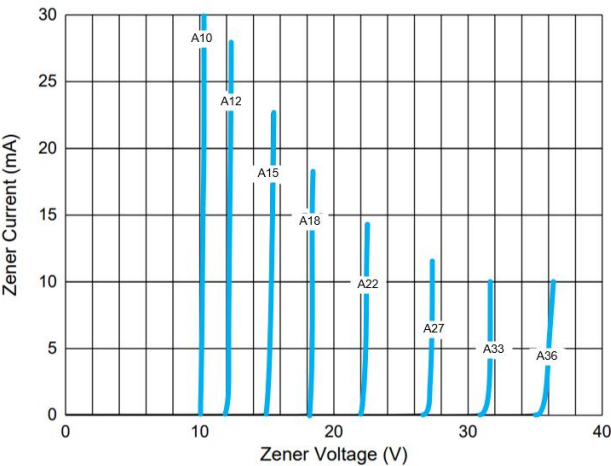
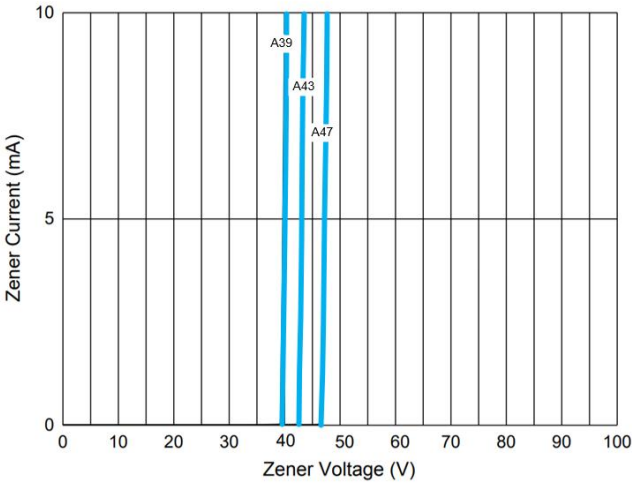


Figure 4. Typical Zener Breakdown Characteristics



Reflow Soldering Parameters

