

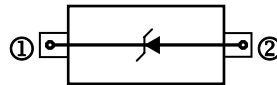
RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

### FEATURES

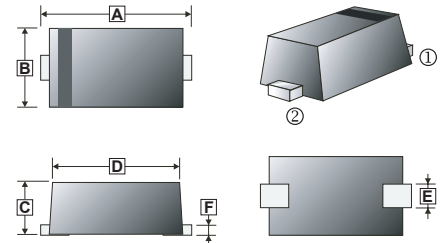
- VZ range selection, 2.4 V ~ 36 V
- Green EMC

### PACKAGING INFORMATION

- Case: SOD-323L, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Flat lead SOD-323L small outline plastic package
- Matte Tin (Sn) Lead finish
- Band indicates cathode
- Weight: 0.008 grams (approximately)



### SOD-323L



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.30	2.80	D	1.60	1.80
B	1.15	1.35	E	0.25	0.40
C	0.80	1.10	F	0.05	0.25

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNITS
Power Dissipation	$P_D$	200	mW
Operating Junction and Storage Temperature Range	$T_J$	-65~150	°C

Notes: These ratings are limiting values above which the serviceability of the diode may be impaired.

### ELECTRICAL RATINGS (Rating 25°C ambient temperature unless otherwise specified)

TYPE NUMBER	MARKING	Vz @ I <sub>ZT</sub> (volts)		I <sub>ZT</sub>	Z <sub>TT(max)</sub> @ I <sub>ZT</sub>	Z <sub>ZK</sub> @ I <sub>ZK</sub>		I <sub>R(max)</sub> @ V <sub>R</sub>	
		Min	Max	mA	Ω	Ω	mA	μA	V
UDZS2V4B	D=, 7C	2.43	2.63	5	100	1000	0.5	120	1.0
UDZS2V7B	D=, 7D	2.69	2.91	5	110	1000	0.5	100	1.0
UDZS3V0B	D>, 7E	3.01	3.22	5	120	1000	0.5	50	1.0
UDZS3V3B	D<, 7F	3.32	3.53	5	120	1000	0.5	20	1.0
UDZS3V6B	D0, 7H	3.60	3.85	5	90	600	1.0	4.5	1.0
UDZS3V9B	D1, 7J	3.89	4.16	5	90	600	1.0	2.7	1.0
UDZS4V3B	D2, 7K	4.17	4.43	5	90	600	1.0	2.7	1.0
UDZS4V7B	D3, 7M	4.55	4.75	5	80	500	1.0	2.7	2.0
UDZS5V1B	D4, 7N	4.98	5.20	5	60	500	1.0	1.8	2.0
UDZS5V6B	D5, 7P	5.49	5.73	5	40	300	1.0	0.9	2.0
UDZS6V2B	D6, 7R	6.06	6.33	5	40	150	1.0	2.7	4.0
UDZS6V8B	D7, 7X	6.65	6.93	5	30	75	1.0	1.8	4.0
UDZS7V5B	D8, 7Y	7.28	7.60	5	30	75	1.0	0.9	5.0
UDZS8V2B	D9, 7Z	8.02	8.36	5	30	75	1.0	0.63	5.0
UDZS9V1B	DA, 8A	8.85	9.23	5	30	90	1.0	0.45	6.0
UDZS10VB	DB, 8B	9.77	10.21	5	20	150	1.0	0.18	7.0
UDZS11VB	DC, 8C	10.76	11.22	5	20	150	1.0	0.09	8.0
UDZS12VB	DE, 8D	11.74	12.24	5	20	150	1.0	0.09	8.0
UDZS13VB	DF, 8E	12.91	13.49	5	40	160	1.0	0.09	8.0
UDZS15VB	DG, 8F	14.34	14.98	5	40	190	1.0	0.045	10.5
UDZS16VB	DH, 8H	15.85	16.51	5	40	190	1.0	0.045	11.2
UDZS18VB	DJ, 8J	17.56	18.35	5	50	220	1.0	0.045	12.6
UDZS20VB	DK, 8K	19.52	20.39	5	60	220	1.0	0.045	14.0
UDZS22VB	DL, 8M	21.54	22.47	5	80	240	1.0	0.045	15.4
UDZS24VB	DM, 8N	23.72	24.78	5	80	240	1.0	0.045	16.8
UDZS27VB	DN, 8P	26.19	27.53	5	100	300	0.5	0.045	18.9
UDZS30VB	DP, 8R	29.19	30.69	5	100	300	0.5	0.045	21.0
UDZS33VB	DR, 8X	32.15	33.79	5	100	310	0.5	0.045	23.0
UDZS36VB	DS, 8Y	35.07	36.87	5	100	330	0.5	0.045	25.2

- Notes:
1. V<sub>F</sub> Forward Voltage = 1 V Maximum @ I<sub>F</sub> = 10 mA for all types
  2. The VZ is tested under pulse condition of 10 ms
  3. The zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an rms value equal to 10% of the dc zener current (I<sub>ZT</sub> or I<sub>ZK</sub>) is superimposed to I<sub>ZT</sub> or I<sub>ZK</sub>.

**CHARACTERISTIC CURVES**

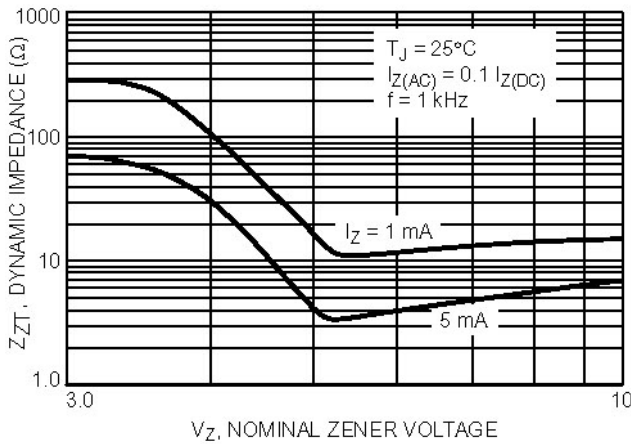


Figure 1. Effect of Zener Voltage on Zener Impedance

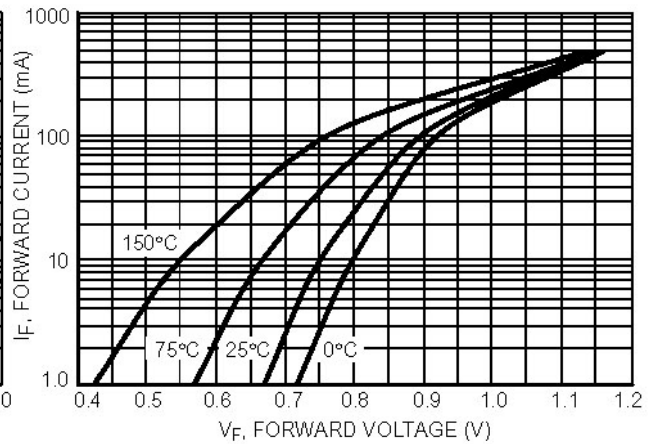


Figure 2. Typical Forward Voltage

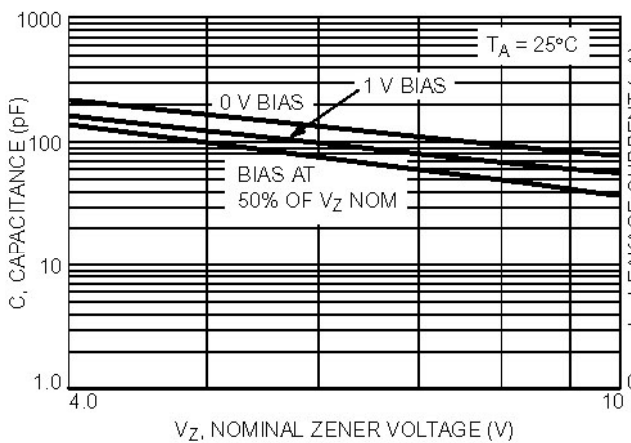


Figure 3. Typical Capacitance

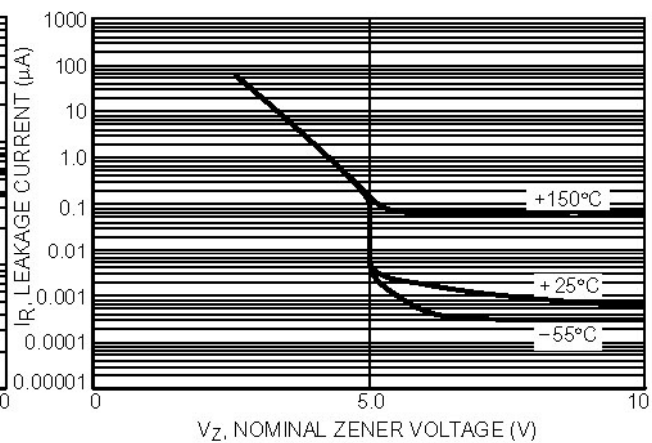


Figure 4. Typical Leakage Current

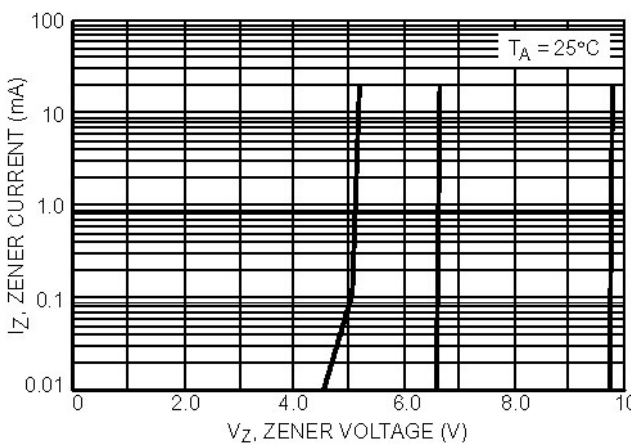


Figure 5. Zener Voltage versus Zener Current ( $V_Z$  Up to 9 V)

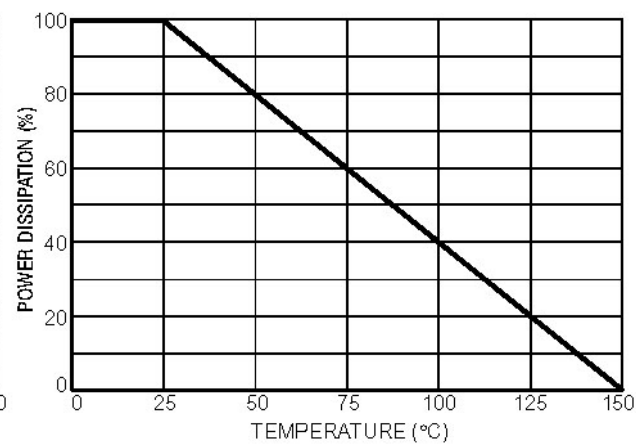


Figure 6. Steady State Power Derating