Elektronische Bauelemente

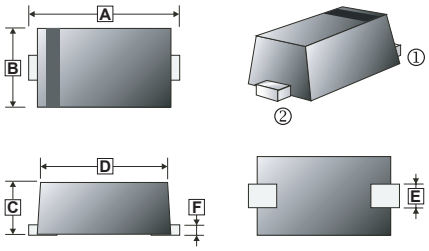
UDZSxxxB Series

200 mW SOD-323L Series

Surface Mount Zener Voltage Regulator Diodes

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

SOD-323L



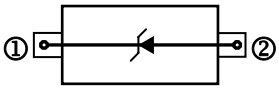
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.30	2.80	D	1.60	1.80
B	1.15	1.35	E	0.25	0.40
C	0.80	1.10	F	0.05	0.25

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)



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	℃

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_{ZT} (volts)		I_{ZT}	Z_{ZT}(max) @ I_{ZT}	Z_{ZK} @ I_{ZK}		I_R(max) @ V_R	
		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_F Forward Voltage = 1 V Maximum @ I_F = 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_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK}.

CHARACTERISTIC CURVES

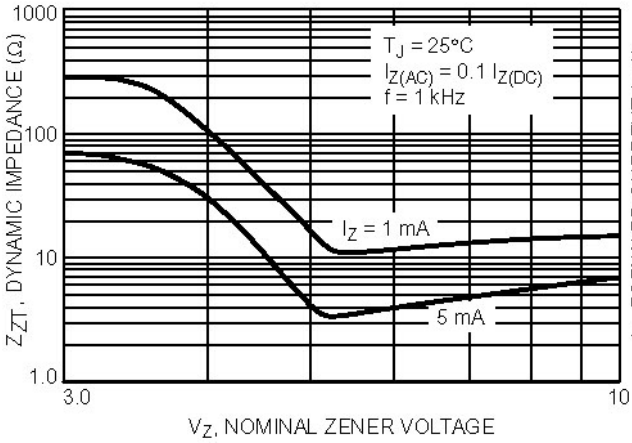


Figure 1. Effect of Zener Voltage on Zener Impedance

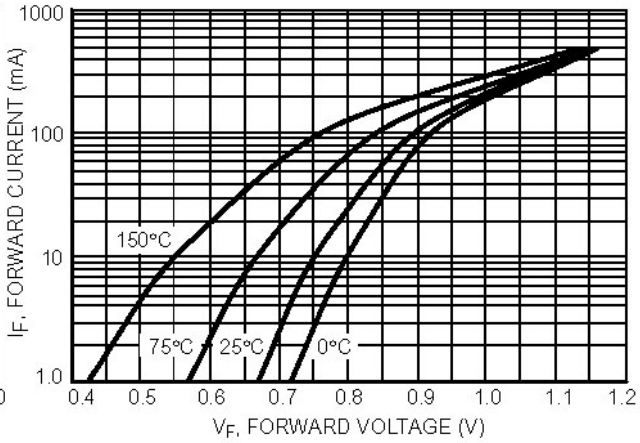


Figure 2. Typical Forward Voltage

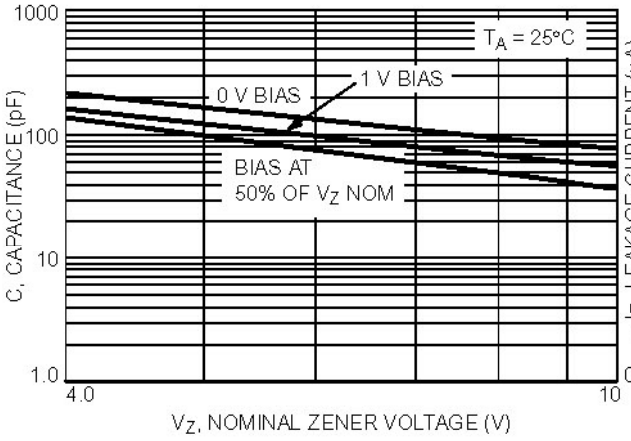


Figure 3. Typical Capacitance

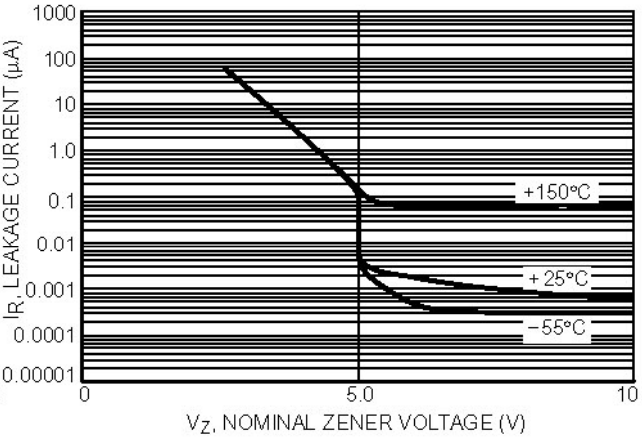


Figure 4. Typical Leakage Current

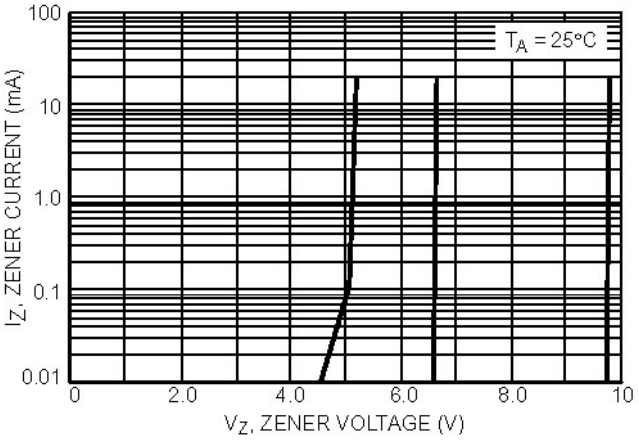


Figure 5. Zener Voltage versus Zener Current (V_Z Up to 9 V)

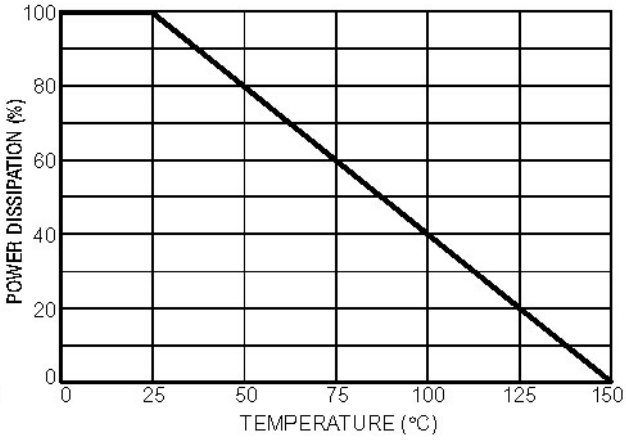


Figure 6. Steady State Power Derating