

Surface Mount Zener Diodes

(Pb) Lead(Pb)-Free

Features:

- * Non-wire bonding structure improves
- * High demand voltage range (3.6V-36V)

Mechanical Data:

- * Case : SOD-323 Molded plastic.
- * Terminals : Solder able per MIL-STD-202, Method208.
- * Polarity : Cathode Indicated by Polarity Band.
- * Marking : Marking Code(See Table on Page.2)
- * Weigh : 0.004grams(approx).

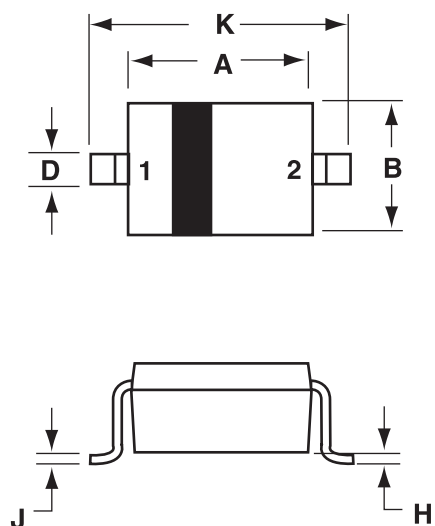
**SMALL SIGNAL
ZENER DIODES
200m WATTS**



SOD-323

SOD-323 Outline Dimensions

Unit:mm



Dim	MILLMETERS	
	Min	Max
A	1.60	1.80
B	1.15	1.35
C	0.80	1.00
D	0.25	0.40
E	0.15REF	
H	0.00	0.10
J	0.089	0.377
K	2.30	2.70

**PIN 1.CATHODE
2.ANODE**

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Parameter	Symbol	Limits	Unit
Power dissipation	P _D	200	mW
Junction temperature	T _J	125	°C
Storage temperature	T _{stg}	-55 to +150	°C
Operating temperature	T _{opr}	-55 to +150	°C

DEVICE MARKING CODE

Device	Marking	Device	Marking	Device	Marking
LUDZS3.6B	62	LUDZS8.2B	J2	LUDZS20B	75
LUDZS3.9B	72	LUDZS9.1B	L2	LUDZS22B	85
LUDZS4.3B	82	LUDZS10B	05	LUDZS24B	95
LUDZS4.7B	92	LUDZS11B	15	LUDZS27B	A5
LUDZS5.1B	A2	LUDZS12B	25	LUDZS30B	C5
LUDZS5.6B	C2	LUDZS13B	35	LUDZS33B	E5
LUDZS6.2B	E2	LUDZS15B	45	LUDZS36B	F5
LUDZS6.8B	F2	LUDZS16B	55	-	-
LUDZS7.5B	H2	LUDZS18B	65	-	-

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$)

Device	Zener voltage			Operating resistance		Rising operating resistance		Reverse current	
	$V_Z(\text{V})$			$Z_Z(\Omega)$		$Z_{zk}(\Omega)$		$I_R(\mu\text{A})$	
	Min.	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	I_Z (mA)	Max.	V_R (V)
LUDZS3.6B	3.600	3.845	5	100	5	1000	1.0	10	1.0
LUDZS3.9B	3.890	4.160	5	100	5	1000	1.0	5	1.0
LUDZS4.3B	4.170	4.430	5	100	5	1000	1.0	5	1.0
LUDZS4.7B	4.550	4.750	5	100	5	800	0.5	2	1.0
LUDZS5.1B	4.980	5.200	5	80	5	500	0.5	2	1.5
LUDZS5.6B	5.490	5.730	5	60	5	200	0.5	1	2.5
LUDZS6.2B	6.060	6.330	5	60	5	100	0.5	1	3.0
LUDZS6.8B	6.650	6.930	5	40	5	60	0.5	0.5	3.5
LUDZS7.5B	7.280	7.600	5	30	5	60	0.5	0.5	4.0
LUDZS8.2B	8.020	8.360	5	30	5	60	0.5	0.5	5.0
LUDZS9.1B	8.850	9.230	5	30	5	60	0.5	0.5	6.0
LUDZS10B	9.770	10.210	5	30	5	60	0.5	0.1	7.0
LUDZS11B	10.760	11.220	5	30	5	60	0.5	0.1	8.0
LUDZS12B	11.740	12.240	5	30	5	80	0.5	0.1	9.0
LUDZS13B	12.910	13.490	5	37	5	80	0.5	0.1	10.0
LUDZS15B	14.340	14.980	5	42	5	80	0.5	0.1	11.0
LUDZS16B	15.850	16.510	5	50	5	80	0.5	0.1	12.0
LUDZS18B	17.560	18.350	5	65	5	80	0.5	0.1	13.0
LUDZS20B	19.520	20.390	5	85	5	100	0.5	0.1	15.0
LUDZS22B	21.540	22.470	5	100	5	100	0.5	0.1	17.0
LUDZS24B	23.720	24.780	5	120	5	120	0.5	0.1	19.0
LUDZS27B	26.190	27.530	5	150	5	150	0.5	0.1	21.0
LUDZS30B	29.190	30.690	5	200	5	200	0.5	0.1	23.0
LUDZS33B	32.150	33.790	5	250	5	250	0.5	0.1	25.0
LUDZS36B	35.070	36.870	5	300	5	300	0.5	0.1	27.0

Notes) 1. The Zener voltage (V_Z) is measured 40ms after power is supplied.

2. The operating resistances (Z_Z , Z_{zk}) are measured by superimposing a minute alternating current on the regulated current (I_Z).

ELECTRICAL CHARACTERISTIC CURVES ($T_a=25^\circ\text{C}$)

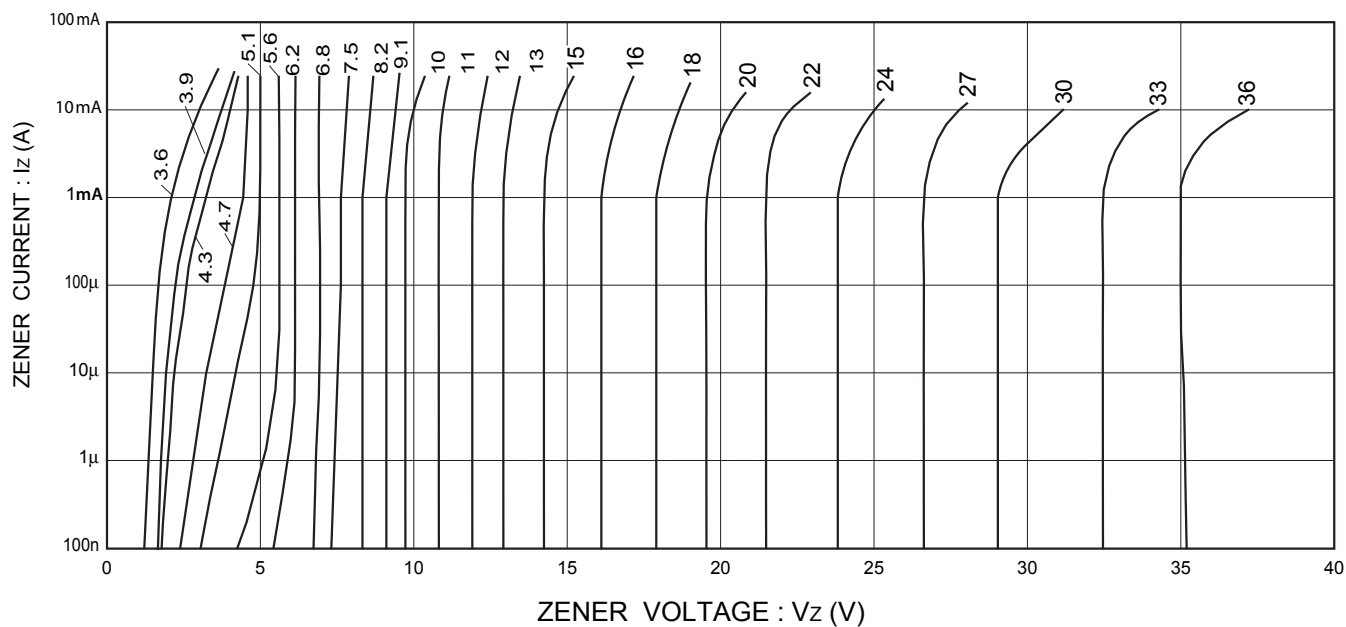


Fig.1 Zener voltage characteristics

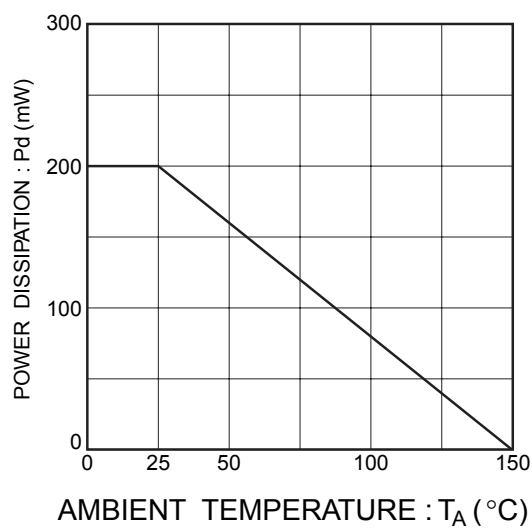


Fig.2 Derating curve

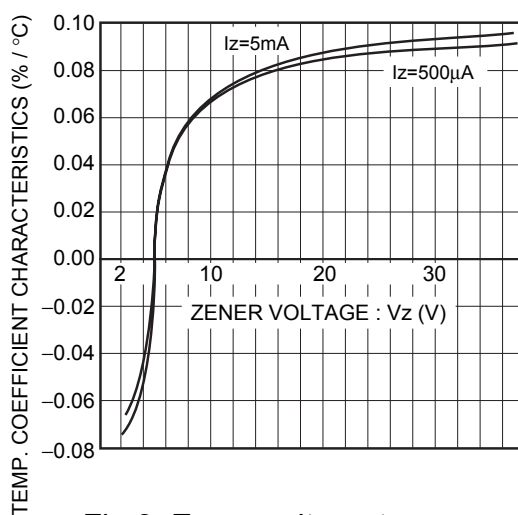


Fig.3 Zener voltage-temp. coefficient characteristics