

UDZ series

Diodes, Zener, 200 mW, surface mount

These Zener diodes are suitable for use in automated surface-mount manufacturing environments. They can be supplied in voltages between 2.0 and 36 V.

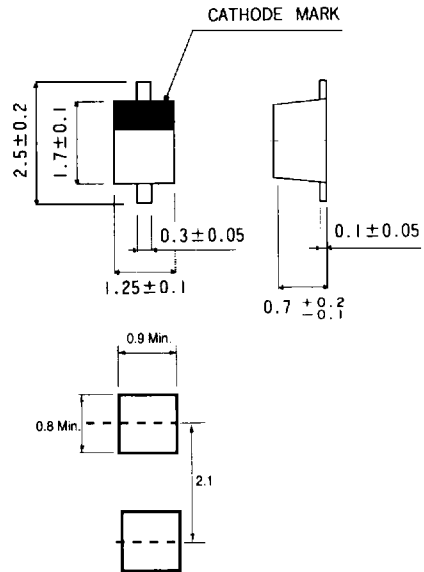
Features

- available in UMD2 (DSM, SOD-323) package
- part marking, see Electrical characteristics table

Applications

- voltage regulator

Dimensions (Units : mm)



Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Power dissipation	P_d	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	$-55 \sim +150$	$^\circ\text{C}$

UDZ series Zener diodes

Electrical characteristics (unless otherwise noted, $T_a = 25^\circ\text{C}$)

Part no.	Marking	Zener voltage subdivision ¹			Operating resistance ²		Rising operating resistance		Reverse current	
		V_Z (V)		I_Z (mA)	Z_Z (Ω) Max	I_Z (mA)	Z_{ZK} (Ω) Max	I_Z (mA)	I_R (μA) Max	V_R (V)
		Min	Max							
UDZ 2.0B	02	2.020	2.200	5	100	5	1000	0.5	120	0.5
UDZ 2.2B	12	2.220	2.410	5	100	5	1000	0.5	120	0.7
UDZ 2.4B	22	2.430	2.630	5	100	5	1000	0.5	120	1.0
UDZ 2.7B	32	2.690	2.910	5	110	5	1000	0.5	100	1.0
UDZ 3.0B	42	3.010	3.220	5	120	5	1000	0.5	50	1.0
UDZ 3.3B	52	3.320	3.530	5	120	5	1000	0.5	20	1.0
UDZ 3.6B	62	3.600	3.845	5	100	5	1000	1	10	1.0
UDZ 3.9B	72	3.890	4.160	5	100	5	1000	1	5	1.0
UDZ 4.3B	82	4.17	4.43	5	100	5	1000	1	5	1.0
UDZ 4.7B	92	4.55	4.75	5	100	5	800	0.5	5	1.0
UDZ 5.1B	A2	4.98	5.20	5	80	5	500	0.5	2	1.5
UDZ 5.6B	C2	5.49	5.73	5	60	5	200	0.5	1	2.5
UDZ 6.2B	E2	6.06	6.33	5	60	5	100	0.5	1	3.0
UDZ 6.8B	F2	6.65	6.93	5	40	5	60	0.5	0.5	3.5
UDZ 7.5B	H2	7.28	7.60	5	30	5	60	0.5	0.5	4.0
UDZ 8.2B	J2	8.02	8.36	5	30	5	60	0.5	0.5	5.0
UDZ 9.1B	L2	8.85	9.23	5	30	5	60	0.5	0.5	6.0
UDZ 10B	05	9.77	10.21	5	30	5	60	0.5	0.1	7.0
UDZ 11B	15	10.76	11.22	5	30	5	60	0.5	0.1	8.0
UDZ 12B	25	11.74	12.24	5	30	5	80	0.5	0.1	9.0
UDZ 13B	35	12.91	13.49	5	37	5	80	0.5	0.1	10
UDZ 15B	45	14.34	14.98	5	42	5	80	0.5	0.1	11
UDZ 16B	55	15.85	16.51	5	50	5	80	0.5	0.1	12
UDZ 18B	65	17.56	18.35	5	65	5	80	0.5	0.1	13
UDZ 20B	75	19.52	20.39	5	85	5	100	0.5	0.1	15
UDZ 22B	85	21.54	22.47	5	100	5	100	0.5	0.1	17
UDZ 24B	95	23.72	24.78	5	120	5	120	0.5	0.1	19
UDZ 27B	A5	26.19	27.53	5	150	5	150	0.5	0.1	21
UDZ 30B	C5	29.19	30.69	5	200	5	200	0.5	0.1	23
UDZ 33B	E5	32.15	33.79	5	250	5	250	0.5	0.1	25
UDZ 36B	F5	35.07	36.87	5	300	5	300	0.5	0.1	27

¹ The Zener voltage subdivision (V_Z) is measured 40 ms after the diode is powered up.

² The operating resistance (Z_Z and Z_{ZK}) is measured by superimposing a minute alternating current in the regulated current (I_Z).

Electrical characteristic curves

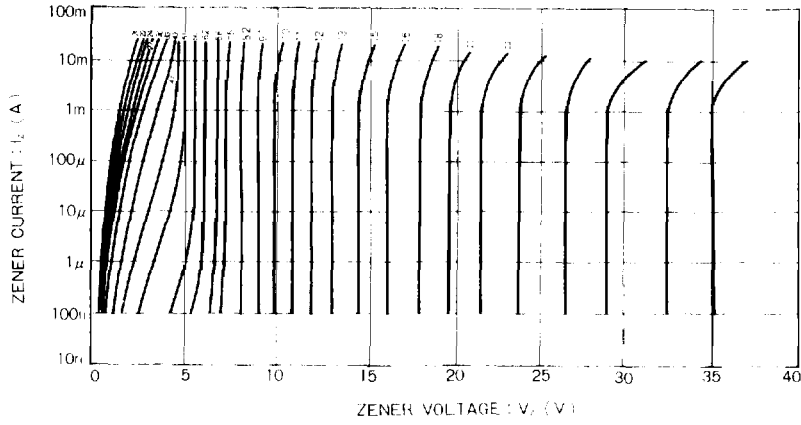


Figure 1

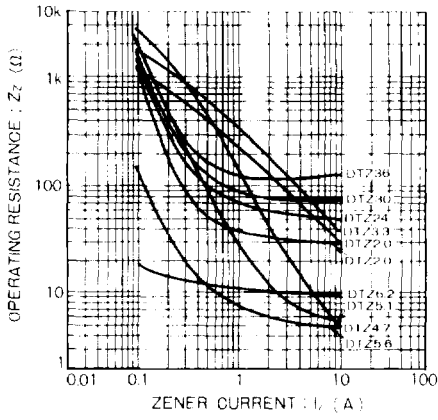


Figure 2

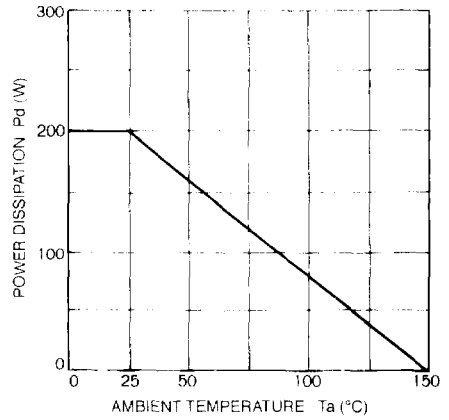


Figure 3